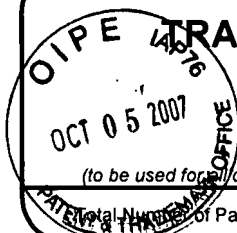


10-09-07


PTO/SB/21 (04-07)

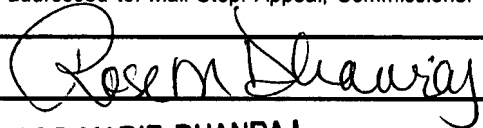
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	<b>TRANSMITTAL FORM</b>	
	Application Number	09/773,883 (Conf. No. 7944)
	Filing Date	January 31, 2001
	First Named Inventor	Kenneth F. Carpenter, Jr.
	Art Unit	2623
	Examiner Name	Scott E. Beliveau
Total Number of Pages in This Submission	Attorney Docket Number	UV-180

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard
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PATENTS  
UV-180

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants : Kenneth F. Carpenter, Jr. et al.  
Application No. : 09/773,883 Confirmation No. : 7944  
Filed : January 31, 2001  
For : INTERACTIVE TELEVISION APPLICATION  
WITH NAVIGABLE CELLS AND REGIONS  
Art Unit : 2623  
Examiner : Scott E. Beliveau  
Mail Stop Appeal Briefs - Patents  
Commissioner for Patents October 5, 2007  
P.O. Box 1450 New York, New York 10036  
Alexandria, Virginia 22313-1450

AMENDED APPEAL BRIEF

Sir:

In response to the September 25, 2007  
Notification of Non-Compliant Appeal Brief, appellants are  
submitting this Amended Appeal Brief pursuant to 37 C.F.R.  
§ 41.37(d). Pursuant to MPEP § 1205.03, this Amended  
Appeal Brief is a complete new brief including the required  
corrections.

Appellants believe that no fee is required in  
connection with this Amended Appeal Brief. However, the  
Director is hereby authorized to charge any fees that may  
be due, or credit any overpayment of the same, to Deposit  
Account No. 06-1075 (Order No. 003597-0180).

In view of the arguments and authorities set forth below, the Board should find the rejection of claims 66-91 to be in error, and the Board should reverse the rejection.

This Brief has the following appendices:

Claims Appendix

Appendix A: Copy of claims 66-91 involved in this appeal;

Evidence Appendices

Appendix B: Copy of the Final Office Action dated October 18, 2006;

Appendix C: Copy of the Reply to Final Office Action dated January 18, 2007;

Appendix D: Copy of the Advisory Action dated February 7, 2007;

Appendix E: Copy of the Pre-Appeal Brief Request for Review dated April 18, 2007;

Appendix F: Copy of Eldering et al. U.S. Patent App. Pub. No. 2002/0026638 A1 (hereinafter "Eldering");

Appendix G: Copy of "IBM Technical Disclosure Bulletin" (hereinafter "IBM Bulletin");

Appendix H: Copy of Matthews III U.S. Patent No. 5,815,145 (hereinafter "Matthews '145"); and

Appendix I: Copy of Matthews III U.S. Patent No. 6,025,837 (hereinafter "Matthews '837");

Related Proceedings Appendix

None.

(i) Real Party in Interest

Appellants respectfully advise the Board that the real party in interest in the above-identified patent application is United Video Properties, Inc., a corporation organized and existing under the laws of the State of Delaware, and having an office and place of business at 6922 Hollywood Boulevard, Los Angeles, CA 90028, which is the assignee of this application.

(ii) Related Appeals and Interferences

Appellants respectfully advise the Board that there are no other appeals or interferences known to appellants, their legal representative, or their assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(iii) Status of Claims

Claims 1-65 have been canceled. Claims 66-91 are finally rejected in this application and are on appeal.

(iv) Status of Amendments

Appellants have not submitted any amendments pursuant to 37 C.F.R. § 1.116 or in reply to the October 18, 2006 final Office Action (hereinafter "Office Action"), from which this appeal is being sought.

(v) Summary of Claimed Subject Matter

Appellants' independent claims 66 and 76 are directed toward a method and system for using an

interactive application on a display screen to access content. See, e.g., specification, page 3, lines 23-21 and FIGS. 3 and 4. At least two cells are provided on the display screen. See, e.g., specification, page 2, line 32 - page 3, line 2 and FIG. 3. Each of the at least two cells is operable to be associated with a television channel and to display, within the cell, video content being broadcast on the television channel. See, e.g., specification, page 3, lines 23-31 and FIG. 3. An indicator is displayed that notifies the user of the availability of interactive content associated with the television channel associated with the cell. See, e.g., specification, page 47, lines 19-32 and FIG. 21. The at least two cells are grouped into a region, and a region highlight is displayed that surrounds the cells in the region. See, e.g., specification, page 3, lines 3-14 and FIGS. 7D and 7E. A user is allowed to navigate the region highlight, wherein no cell highlight appears on the display while the user is navigating the region highlight. See, e.g., specification, page 24, line 7 - page 26, line 25 and FIGS. 7A, 7B, 7C, 7D, and 7E. In response to a user selection of a region surrounded by the region highlight, a cell highlight is displayed around a cell in the selected region. See, e.g., specification, page 28, line 16 - page 29, line 10 and FIG. 9B. The user is then allowed to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus. See, e.g., specification, page 3, lines 15-31 and FIGS. 5A and 5B. Finally, the user is allowed to access the interactive content associated with the television channel for a cell for which an indicator is displayed and which is in focus.

See, e.g., specification, page 47, line 19 - page 48, line 17.

(vi) Grounds of Rejection to be Reviewed on Appeal

The grounds of rejection to be reviewed on this appeal are:

a) the final rejection of claims 66-68, 76-78, 86, 87, 89, and 90 under 35 U.S.C. § 103(a) as being unpatentable over Eldering in view of the IBM Bulletin, in further view of Matthews '145, and in further view of Matthews '837;

b) the final rejection of claims 69-71, 79-81, 88, and 91 under 35 U.S.C. § 103(a) as being unpatentable over Eldering in view of the IBM Bulletin, in further view of Matthews '145, in further view of Matthews '837, and in further view of Lawler et al. U.S. Patent No. 5,585,838 (hereinafter "Lawler"); and

c) the final rejection of claims 72-75 and 82-85 under 35 U.S.C. § 103(a) as being unpatentable over Eldering in view of the IBM Bulletin, in further view of Matthews '145, in further view of Matthews '837, and in further view of Goldschmidt Iki et al. U.S. Patent No. 6,295,646 (hereinafter "Goldschmidt Iki").

(vii) Argument

A. Claims 66-68, 76-78, 86, 87, 89, and 90

Appellants independent claims 66 and 76 are directed toward a novel method and system, respectively, for navigating a display screen by region. The display screen includes at least two cells, and each cell is configured to display video content being broadcast on a

television channel associated with the cell. At least two of the cells are grouped into a region, and a region highlight is displayed around the grouped cells. The user is then allowed to navigate the region highlight without a cell highlight appearing on the display. If the user selects a region surrounded by the region highlight, a cell highlight is displayed around a cell within the selected region. The user may then navigate the cell highlight to each of the cells in the selected region. The cell that is surrounded by the cell highlight is in focus. The user may then access interactive content associated with a television channel associated with the cell that is in focus and for which an indicator is displayed.

Appellants' claimed invention is an improvement over traditional cell-based navigation techniques that require a user to navigate a display screen on a cell-by-cell or element-by-element basis. By grouping cells into regions and providing a region highlight, appellants' claimed invention facilitates simple and efficient navigation between and within grouped cells on a display screen. Appellants claimed invention also allows seamless access to interactive content associated with a television channel associated with a cell.

The Office Action contends that the combination of Eldering, the IBM Bulletin, Matthews '145, and Matthews '837 shows all of appellants' claimed features recited in independent claims 66 and 76. The Office Action also contends that it would have been obvious for one skilled in the art to combine the relevant teachings of Eldering, the IBM Bulletin, Matthews '145, and Matthews '837 to arrive at appellants' claimed invention. See Office Action, pages 4-14. Appellants respectfully

disagree and request that the Board overturn the rejection because the four references, even when combined, do not show or suggest all of appellants' claimed features recited in each of independent claims 66 and 76. Moreover, even if the four references did show all of appellants' claimed features, there could be no possible motivation for one skilled in the art to combine the inapposite teachings cited in the Office Action to arrive at appellants' claimed invention.

1. The Combination of Eldering and the IBM Bulletin Would Not Result in a Navigable Region Highlight Wherein No Cell Highlight Appears on the Display While the User is Navigating the Region Highlight

It is well-established that "to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art" (MPEP § 2143.03); *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). As described below, the § 103(a) rejection should be overturned at least because the Examiner's combination fails to disclose the claimed feature of "allowing a user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight," as recited by each of independent claims 66 and 76.

Eldering describes an electronic program guide (EPG) that supports targeted advertisement insertion. See Eldering, ¶ 0021. Eldering mentions that "in certain embodiments, the advertisements and the guide portion of the EPG may be combined to form a single HTML file" (Eldering, ¶ 0040). Eldering also mentions that "the guide portion and the advertisements may each comprise different



frames in a frameset." *Id.* This is the only disclosure in Elderling of any groupings of displayed elements.

The IBM Bulletin consists of a couple of paragraphs pertaining to website frames. The IBM Bulletin mentions that one solution to the problem of not knowing which frame of a website has input focus is to provide "a highlight border around the frame which has focus" (IBM Bulletin, page 2). The IBM Bulletin is largely silent as to how the highlight border would be implemented or incorporated into an actual website. *See generally* IBM Bulletin.

The Office Action admits that Elderling "is generally silent with respect to the particular composition and ability to navigate between regions" of a display screen (Office Action, page 4). Nevertheless, the Office Action contends that the combination of Elderling and the IBM Bulletin produces a navigable region highlight. *See* Office Action, page 5. Appellants respectfully disagree.

Elderling merely states that different portions of the electronic program guide (EPG) screen may "comprise different frames in a frameset" (*Elderling*, ¶ 0040). Elderling is silent as to how a user navigates among the different windows or even if the individual windows are selectable or navigable by a user in any way. *See* *Elderling*, ¶¶ 0032, 0040-0044. As such, Elderling cannot possibly show or suggest navigation using any type of highlight. Moreover, the IBM Bulletin makes no mention of navigation using the highlight border. All the IBM Bulletin describes is using a highlight to indicate which frame in a website has input focus. The IBM Bulletin mentions that providing a highlight border may be useful in determining which frame will be printed if the user selects

a "print frame" option. See generally IBM Bulletin. There is no mention in the IBM Bulletin, however, of navigating the highlight border to other frames.

In order to accept the Office Action's position, Eldering must initially be modified to make Eldering's windows navigable. Only then can the Examiner even begin reasoning that a frame highlight is needed. Incorporating the IBM Bulletin's highlight border into Eldering would just provide the user with a highlight around the frame in Eldering's FIG. 1 display screen that has input focus. The references are completely devoid of any ability to navigate the highlight by grouped cells or regions.

Therefore, contrary to the Office Action's contention, neither Eldering nor the IBM Bulletin, alone or in combination, show or suggest "allowing a user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight," as recited by each of independent claims 66 and 76. At best, the combination results in an EPG screen with a highlight border around the frame with input focus. There is no suggestion of using this newly added highlight border to navigate between regions of grouped cells. To be sure, using a highlight border to indicate which frame has input focus and navigating using a region highlight are quite different.

At least because appellants' claimed feature of "allowing a user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight," is not shown or suggested by the references, appellants respectfully request that the Board overturn the § 103(a) rejection of independent claims 66 and 76. The rejection

of dependent claims 67-75 and 77-91, which include all the limitations of one of independent claims 66 or 76, should be overturned for at least the same reason.

2.     The Examiner's Motivation to Combine  
          The References in Wholly Inadequate

The Office Action suggests that it would have been obvious to incorporate the IBM Bulletin's highlight border into Eldering in order to "provid[e] feedback to the user as to which frame/region within the interface has input focus" (*Office Action*, page 5). Although this motivation may be relevant to adding a highlight border, it is wholly inadequate to motivate one skilled in the art to use this newly added highlight border to navigate by grouped cells. As described above, none of the references cited in the Office Action mentions or reasonably suggests navigating by region using a region highlight, and the Office Action's motivation does not address navigation at all.

The Office Action also admits that the combination of Eldering and the IBM Bulletin "is silent with respect to further details" recited in appellants' independent claims 66 and 76. See *Office Action*, page 5. Namely, the Office Action admits that the combination of Eldering and the IBM Bulletin does not show or suggest at least two cells operable to display, within the cell, video content being broadcast on a television channel associated with the cell. *Id.* However, the Office Action contends that Matthews '145 shows such an arrangement and that it would have been obvious to combine Eldering, as modified by the IBM Bulletin, with Matthews '145 "for the purpose of taking advantage of the graphics-based nature of IT systems in association with the presentation of program guide

services." See Office Action, page 6. Initially, appellants submit that this motivation is far too broad and conclusory to motivate anyone skilled in the art to modify the references. Moreover, the references teach away from being combined in such a manner.

Matthews '145 describes a system for displaying a multi-frame video segment relating to programming available on selected channels during a selected programming period. See Matthew's '145, Abstract. A series of video programming tiles are arranged in a display screen. See Matthew's '145, col. 4, lines 44-61 and FIG. 4. A user may navigate between or select one of the displayed programming tiles using a cursor and a control keypad. See Matthew's '145, col. 4, lines 62-64 and col. 5, lines 6-23.

Matthews '145 approaches the problem of navigable regions in a completely different way than appellants' claimed invention -- a way that negates the need for any region highlight. Namely, as shown in FIG. 6, a user in Matthews '145 may navigate a cursor within a programming tile strip (i.e., programming guide space 150 of FIG. 6) to cause "screen 98 to shift leftward in the programming guide space" (Matthews '145, col. 10, ll. 11-25). Thus, screen 98 of FIG. 4 only displays one region (e.g., of six tiles) of a larger virtual display at a time -- the region selected by the cursor in programming guide space 150. Since only one region is displayed in screen 98 at a time, there would be no reason for one skilled in the art to incorporate a region highlight to navigate between regions in the display screen. Matthews '145 already provides a solution for navigating and selecting a grouping of programming tiles for display using the programming tile

strip. Therefore, the need for a region highlight is completely eliminated.

As such, appellants respectfully submit that there could be no possible motivation to combine the references in the manner suggested in the Office Action. The region highlight would serve no purpose nor add any functionality that does not already exist in the references. Rather, appellants have recited a unique approach for grouping cells into regions and navigating between the regions using a region highlight in independent claims 66 and 76.

For this independent reason, appellants submit that independent claims 66 and 76 are not obvious in view of the cited references. Dependent claims 67, 68, 77, 78, 86, 87, 89, and 90, each of which includes all the limitations of one of independent claims 66 or 76, are not obvious for at least the same reasons.

B. Claims 69-71, 79-81, 88, and 91

Claims 69-71, 79-81, 88, and 91 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eldering in view of the IBM Bulletin, in further view of Matthews '145, in further view of Matthews '837, and in further view of Lawler. These claims, each of which includes all the limitations of one of independent claims 66 or 76, are allowable for at least the same reasons as set forth above.

C. Claims 72-75 and 82-85

Claims 72-75 and 82-85 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eldering in view of the IBM Bulletin, in further view of Matthews '145, in

further view of Matthews '837, and in further view of Goldschmidt Iki. These claims, each of which includes all the limitations of one of independent claims 66 or 76, are allowable for at least the same reasons as set forth above.

D. Conclusion

For the foregoing reasons, appellants submit that the cited references, alone or in combination, do not render any of appellants' claims 66-91 obvious. The Office Action's rejection of these claims should, therefore, be reversed.

Respectfully submitted,



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(viii) Claims Appendix



CLAIMS APPENDIX A  
CLAIMS ON APPEAL

66. A method for using an interactive application on a display screen to access content, the method comprising:

providing at least two cells on a display screen, wherein each of the at least two cells is operable to be associated with a television channel and is operable to display, within the cell, video content being broadcast on the television channel;

for each of at least one of the cells that is associated with a television channel, displaying an indicator which notifies a user of the availability of interactive content associated with the television channel associated with the cell;

grouping the at least two cells into a region;

displaying a region highlight that surrounds the cells in the region;

allowing a user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight; and

in response to a user selection of the region surrounded by the region highlight:

displaying a cell highlight around a cell in the selected region;

allowing the user to navigate the cell highlight to each of the cells in the selected region,

wherein only the cell that is surrounded by the cell highlight is in focus; and

for a cell for which an indicator is displayed and which is in focus, allowing the user to access the interactive content associated with the television channel associated with the cell.

67. The method of claim 66, wherein the indicator is displayed in at least one of: the cell having an associated television channel for which interactive content is available, and an area in close proximity to that cell.

68. The method of claim 67, further comprising:  
for each cell that is associated with a television channel and which is not in focus, displaying in the cell a graphical brandmark of the television channel associated with the cell; and

if the cell in focus is associated with a television channel, displaying in the cell video content being broadcast on the television channel.

69. The method of claim 68, further comprising:  
for each of at least one of the cells that is associated with a television channel, displaying an option indicator which notifies a user of at least one option corresponding to the television channel associated with the cell; and

for a cell for which an option indicator is displayed and which is in focus, allowing a user to select one of the at least one option.



70. The method of claim 69, wherein the television channel is a video on demand channel, and wherein the at least one option includes at least one of: ordering the video on demand channel, and placing an order for a program from the video on demand channel.

71. The method of claim 69, wherein the at least one option includes at least one of: recording a current program on the television channel, setting a reminder for a future program on the television channel, and designating the television channel as a favorite channel.

72. The method of claim 68, wherein at least one of the cells is operable to display Web content within the cell.

73. The method of claim 68, wherein at least one of the cells is associated with a television channel and at least one of the cells is associated with a non-television entity.

74. The method of claim 73, further comprising:  
receiving a signal indicating selection of the cell in focus; and

if the cell in focus is associated with a television channel, displaying, in full screen on the display screen, video content being broadcast on the television channel.

75. The method of claim 73, further comprising:  
allowing a user to disassociate a television channel from a cell; and

allowing a user to associate a television channel with a cell.

76. A system for accessing content through an interactive application, the system comprising:

a display screen;

a communication link configured to access content;

a processor configured to:

instruct the display screen to display at least two cells that are each operable to be associated with a television channel, wherein each of the cells is operable to display, within the cell, video content being broadcast on the television channel;

for each of at least one of the cells that is associated with a television channel, instruct the display screen to display an indicator which notifies a user of the availability of interactive content associated with the television channel associated with the cell;

group the at least two cells into a region;

instruct the display screen to display a region highlight that surrounds the cells in the region;

allow a user to navigate a region highlight to the region, wherein no cell highlight appears on the display screen while the user is navigating the region highlight; and

in response to a user selection of the region surrounded by the region highlight:

instruct the display screen to display a cell highlight around a cell in the selected region;

allow the user to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus; and

for a cell for which an indicator is displayed and which is in focus, allowing the user to access the interactive content associated with the television channel associated with the cell.

77. The system of claim 76, wherein the processor is configured to instruct the display screen to display the indicator in at least one of: the cell having an associated television channel for which interactive content is available, and an area in close proximity to that cell.

78. The system of claim 77, wherein the processor is configured to instruct the display screen to:

for each cell that is associated with a television channel and which is not in focus, display in the cell a graphical landmark of the television channel associated with the cell; and

if the cell in focus is associated with a television channel, display in the cell video content being broadcast on the television channel.

79. The system of claim 78, wherein the processor is configured to:

for each of at least one of the cells that is associated with a television channel, instruct the display screen to display an option indicator which notifies a user of at least one option corresponding to the television channel; and

for a cell for which an option indicator is displayed and which is in focus, allow a user to select one of the at least one option.

80. The system of claim 79, wherein the television channel is a video on demand channel, and wherein the at least one option includes at least one of: ordering the video on demand channel, and placing an order for a program from the video on demand channel.

81. The system of claim 79, wherein the at least one option includes at least one of: recording a current program on the television channel, setting a reminder for a future program on the television channel, and designating the television channel as a favorite channel.

82. The system of claim 78, wherein at least one of the cells is operable to display Web content within the cell.

83. The system of claim 78, wherein at least one of the cells is associated with a television channel and at least one of the cells is associated with a non-television entity.

84. The system of claim 83, further comprising a user input, and wherein the processor is configured to:

receive a signal from the user input indicating selection of the cell in focus; and

if the cell in focus is associated with a television channel, instruct the display screen to display, in full screen, video content being broadcast on the television channel.

85. The system of claim 83, wherein the processor is configured to:

allow a user to disassociate a television channel from a cell; and

allow a user to associate a television channel with a cell.

86. The method of claim 66, wherein the region includes at least one cell associated with a television channel, the method further comprising:

providing a second region on the display screen that includes the at least one cell associated with a non-television entity.

87. The method of claim 66, further comprising:

providing at least one advertisement cell on the display screen, wherein the advertisement cell is distinct from the at least two cells;

grouping the at least one advertisement cell into a second region; and

allowing a user to navigate the region highlight to the second region.

88. The method of claim 69, wherein at least one of the indicator and the option indicator is a generic icon.

89. The system of claim 76, wherein the region includes at least one cell associated with a television channel, wherein the processor is further configured to:

instruct the display screen to display second region that includes the at least one cell associated with a non-television entity.

90. The system of claim 76, wherein the processor is further configured to:

instruct the display screen to display at least one advertisement cell, within the at least one advertisement cell is distinct from the at least two cells;

group the at least one advertisement cell into a second region;

allow the user to navigate the region highlight to the second region.

91. The system of claim 79, wherein at least one of the indicator and the option indicator is a generic icon.

(ix) Evidence Appendix

EVIDENCE APPENDIX B  
COPY OF FINAL OFFICE ACTION  
DATED OCTOBER 18, 2006



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,883	01/31/2001	Kenneth F. Carpenter JR.	UV-180	7944
1473	7590	10/18/2006		
FISH & NEAVE IP GROUP ROPES & GRAY LLP 1251 AVENUE OF THE AMERICAS FL C3 NEW YORK, NY 10020-1105				
			EXAMINER BELIVEAU, SCOTT E	
			ART UNIT 2623	PAPER NUMBER

DATE MAILED: 10/18/2006

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Action Desc: Response to final office action  
Due Date: Jan. 18, 2007 & Apr. 18, 2007  
By [Signature]



## Office Action Summary

**Application No.**

09/773,883

**Applicant(s)**

CARPENTER ET AL.

**Examiner**

Scott Beliveau

**Art Unit**

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 66-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 66-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e). The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/179,523, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. The '523 filing discloses "providing at least two cells on a display screen, wherein each of the at least two cells is operable to be associated with a television channel and is operable to display within the cell, video content being broadcast on the television channel". The filing, however, does not disclose that the particular cells further comprise an "indicator which notifies a user of the availability of interactive content associated with the television channel associated with the cell".

The disclosure of the prior-filed application, Application No. 60/179,552, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. The '552 filing discloses the missing

Art Unit: 2623

element of the '523 filling of "displaying an indicator which notifies a user of the availability of interactive content associated with the television channel associated with the cell" and "for a cell in which an indicator I displayed and which is in focus, allowing a user to access the interactive content associated with the television channel associated with the cell". However, the '552 filling does not "providing at least two cells on a display screen, wherein each of the at least two cells is operable to be associated with a television channel and is operable to display within the cell, video content being broadcast on the television channel". Neither prior-filling contemplates or incorporates disclosure of the other. Accordingly, the application shall be examined on the basis of its filling date or 31 January 2001.

#### *Response to Arguments*

2. Applicant's arguments with respect to claims 66-91 have been considered but are moot in view of the new ground(s) of rejection.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent

Art Unit: 2623

any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 66-68, 76-78, 86, 87, 89, and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering et al. (US Pub No. 2002/0026638 A1), in view of the "IBM Technical Disclosure Bulletin" (of record), in view of Matthews, III (US Pat No. 5,815,145), and in further view of Matthews, III et al. (US Pat No. 6,025,837).

Regarding claim 66, the Eldering et al. reference discloses a "method for using an interactive application" such as an EPG "on a display screen top access content" (Figure 1). In particular, as illustrated in Figure 1, the EPG comprises a region associated with advertisements [103/105/107] comprising a number of 'cells' and a region corresponding to program/channel listings [101] (Para. [0032]). The reference teaches that the particular regions, as would be understood by persons of skill in the art of Web page design and implementation, are delineated by frames (Para. [0040]). Accordingly, the reference generally provides for an EPG comprising a number of regions (ex. advertising region [103/105/107] and program listing region [101]) delineated by frames, but is generally silent with respect to the particular composition and ability to navigate between regions.

In an analogous art related to interactive television and in particular problems associated with display interfaces, the IBM article discloses that it is desirable to "display a region highlight that surrounds . . . [a] region" of a web-page and to "allow [a] user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user

Art Unit: 2623

is navigating the region highlight” given that the reference merely teaches the particular highlighting of a particular frame upon which has input focus. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Eldering et al. EPG interface [100] so to “display a region highlight that surrounds . . . [a] region” such as that associated with either the advertisements [103/105/107] or the program/channel listings [101] and to “allow [a] user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight” for the purpose of providing feedback to the user as to which frame/region within the interface has input focus. Subsequently, the combined references provide for an electronic programming guide comprising a number of frames/regions in which upon navigating to a particular region a highlight border is provided around the frame that has focus in order to show the boundaries of the frame. The combination, however, is silent with respect to further details associated with the program/channel listings [101] as claimed.

In an analogous art pertaining to interactive user interfaces and in particular electronic programming guides the Matthews, III reference discloses a “method for using an interactive application” or program guide on a “display screen” [18] to access content. As illustrated in Figure 4, the method comprises “providing at least two cells” [104] on a “display screen” [18] wherein “each of the at least two cells is operable to be associated with a television channel and is operable to display, within the cell, video content being broadcast on the television channel”. As illustrated, the program/channel listings comprise “grouping . . . at least two cells into a region” wherein “in response to a user selection of the region . . .

displaying a cell highlight” [108] “around a cell in the selected region” such that the “user [is allowed] to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus” (Figure 5; Col 4, Line 44 – Col 5, Line 46). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined references to utilize the program listing teachings of Matthews, III so as to “provide at least two cells on a display screen, wherein each of the at least two cells is operable to be associated with a television channel and is operable to display, within the cell, video content being broadcast on the television channel; . . . grouping the at least two cells into a region; displaying a region highlight that surrounds the cells in the region; allowing a user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight; and in response to a user selection of the region surrounded by the region highlight; displaying a cell highlight around a cell in the selected region; allowing the user to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus” for the purpose of taking advantage of the graphics-based nature of IT systems in association with the presentation of program guide services (Matthews, III: Col 1, Lines 61 – Col 2, Line 3). The combination of references is silent with respect to “notifying a user of the availability of interactive content” that the user is subsequently able to access.

In an analogous art pertaining to interactive television applications, Figures 5 and 6 of the Matthews, III et al. reference discloses “for each of the at least one of the cells that is associated with a television channel, displaying an indicator which notifies a user of the

Art Unit: 2623

availability of interactive content associated with the television channel associated with the cell” and “for a cell which an indicator is displayed and which is in focus, allowing a user to access the interactive content associated with the television channel associated with the cell” (Col 9, Line 1 – Col 10, Line 37; Col 10, Line 56 – Col 11, Line 21). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the electronic programming guide or ‘interactive application’ to further “display an indicator which notifies a user of the availability of interactive content associated with the television channel associated with the cells” and to further “allow a user to access the interactive content associated with the television channel associated with the cell” for the purpose of advantageously provide a means by which to integrate supplemental content within the program guide for easy access (Matthews, III et al.: Col 4, Lines 17-24 and 59-65).

Regarding claim 76, the Eldering et al. reference discloses a “system for accessing content through an interactive application” such as an EPG. As illustrated in Figure 2, the system comprises a “display screen” or television (Para. [0060]), a “communication link configured to access content” [202/232] (Para. [0052], [0053], and [0061]), and a “processor” [204] that controls the operation of the system (Para. [0053]). In particular, as illustrated in Figure 1, the “processor” is operable to ‘instruct the display screen to display’ an EPG comprising a region associated with advertisements [103/105/107] consisting of a number of ‘cells’ and a region corresponding to program/channel listings [101] (Para. [0032]). The reference teaches that the particular regions, as would be understood by persons of skill in the art of Web page design and implementation, are delineated by frames (Para. [0040]).

Accordingly, the reference generally provides for an EPG comprising a number of regions (ex. advertising region [103/105/107] and program listing region [101]) delineated by frames, but is generally silent with respect to the particular composition and ability to navigate between regions.

In an analogous art related to interactive television and in particular problems associated with display interfaces, the IBM article discloses that it is desirable to “instruct [a] display screen to display a region highlight that surrounds . . . [a] region” of a web-page and to “allow [a] user to navigate a region highlight to the region, wherein no cell highlight appears on the display screen while the user is navigating the region highlight” given that the reference merely teaches the particular highlighting of a particular frame upon which has input focus. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Eldering et al. “processor” [204] to “instruct the display screen to display a region highlight that surrounds . . . [a] region” such as that associated with either the advertisements [103/105/107] or the program/channel listings [101] and to “allow [a] user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight” for the purpose of providing feedback to the user as to which frame/region within the interface has input focus. Subsequently, the combined references provide for an electronic programming guide comprising a number of frames/regions in which upon navigating to a particular region a highlight border is provided around the frame that has focus in order to show the boundaries of the frame. The combination, however, is silent with respect to further details associated with the program/channel listings [101] as claimed.



Art Unit: 2623

In an analogous art pertaining to interactive user interfaces and in particular electronic programming guides, the Matthews, III reference similarly discloses a “display screen” [18] and a “processor” [58] (Figure 2; Col 7, Line 7 – Col 8, Line 14). As illustrated in Figure 4, the “processor” [58] is configured to “instruct the display screen to display at least two cells” [104] “that are each operable to be associated with a television channel, wherein each of the cells is operable to display, within the cell, video content being broadcast on the television channel”. As illustrated, the program/channel listings comprise “group[ing] . . . at least two cells into a region” wherein “in response to a user selection of the region . . . displaying a cell highlight” [108] “around a cell in the selected region” such that the “user [is allowed] to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus” (Figure 5; Col 4, Line 44 – Col 5, Line 46). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined references to utilize the program listing teachings of Matthews, III such that the “processor [is] configured to instruct the display screen to display at least two cells that are each operable to be associated with a television channel, wherein each of the cells is operable to display, within the cell, video content being broadcast on the television channel; . . . group[ing] the at least two cells into a region; instruct[ing] the display screen to display a region highlight that surrounds the cells in the region; allow[ing] a user to navigate a region highlight to the region, wherein no cell highlight appears on the display while the user is navigating the region highlight; and in response to a user selection of the region surrounded by the region highlight; instruct[ing] the display screen to display a cell highlight around a cell in the selected region; [and] allow[ing]

Art Unit: 2623

the user to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus” for the purpose of taking advantage of the graphics-based nature of IT systems in association with the presentation of program guide services (Matthews, III: Col 1, Lines 61 – Col 2, Line 3). The combination of references is silent with respect to “notifying a user of the availability of interactive content” that the user is subsequently able to access.

In an analogous art pertaining to interactive television applications, Figures 5 and 6 of the Matthews, III et al. reference discloses a “processor” [92] that is “configured” such that “for each of the at least one of the cells that is associated with a television channel, [the display screen is] instructed . . . to display an indicator which notifies a user of the availability of interactive content associated with the television channel associated with the cell” and “for a cell which an indicator is displayed and which is in focus, [the user is] allow[ed] . . . to access the interactive content associated with the television channel associated with the cell” (Col 9, Line 1 – Col 10, Line 37; Col 10, Line 56 – Col 11, Line 21). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the Eldering “processor” [202] to further “display an indicator which notifies a user of the availability of interactive content associated with the television channel associated with the cells” and to further “allow a user to access the interactive content associated with the television channel associated with the cell” for the purpose of advantageously provide a means by which to integrate supplemental content within the program guide for easy access (Matthews, III et al.: Col 4, Lines 17-24 and 59-65).

Claims 67 and 77 are rejected wherein the “indicator is displayed in at least one of: the cell having an associated television channel for which interactive content is available, and an area in close proximity to that cell” (Matthews, III et al.: Figure 5).

Claims 68 and 78 are rejected wherein “for each cell that is associated with a television channel and which is not in focus, displaying in the cell a graphical landmark of the television channel associated with the cell; and if the cell in focus is associated with a television channel, displaying in the cell video content being broadcast on the television channel” (Matthews, III: Col 4, Lines 56-61; Col 5, Lines 23-36).

Claims 86 and 89 is rejected in light of the aforementioned combination of references wherein the “region” [101] comprises “at least one cell associated with a television channel” (Matthews, III: Figure 4; Col 4, Lines 44-55). Figure 1 of Eldering et al. further illustrates “providing a second region” or advertising region [103/105/107] that “includes the at least one cell associated with a non-television entity” or website derived advertisement (Para. [0046]).

Claims 87 and 90 are rejected in light of the aforementioned combination of references. As previously discussed, Figure 1 of Eldering et al. further “provides at least one advertisement cell” [103/105/107] “on the display screen, wherein the advertisement cell is distinct from the at least two cells” by virtue of their on-screen arrangement, content, etc.. The “at least one advertisement cell” is logically “grouped . . . into a second region” corresponding to a separate frame such that “[the user is] allowed . . . to navigate the region highlight to the second region” as taught by the IBM technical disclosure for the purpose of

providing feedback to the user as to which frame/region (ex. program listing region or advertising region) within the interface has input focus.

6. Claims 69-71, 79-81, 88, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering et al. (US Pub No. 2002/0026638 A1), in view of the "IBM Technical Disclosure Bulletin" (of record), in view of Matthews, III (US Pat No. 5,815,145), in view of Matthews, III et al. (US Pat No. 6,025,837), and in further view of Lawler et al. (US Pat No. 5,585,838).

In consideration of claims 69 and 79, the combined references are silent with respect to further "displaying an option indicator" as claimed. In an analogous art pertaining to interactive television applications, the Lawler et al. reference discloses "displaying an option indicator which notifies a user of at least one option corresponding to the television channel associated with the cell; and for a cell which is in focus, allowing a user to select one of the at the least one option" (Col 13, Line 53 – Col 14, Line 48). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the combined references so as to "display an option indicator" for the common knowledge advantage of providing a simplified means by which the user can identify desired programs and services and to perform actions related to those programs (Lawler et al.: Col 1, Lines 26-33).

Claims 70 and 80 are rejected wherein the "television channel is a video on demand channel, and wherein the at least one option includes at least one of . . . placing an order for a program from the video on demand channel" (Matthews, III: Col 9, Lines 26-49; Lawler et al.: Col 14, Lines 16-23; Col 16, Lines 35 – Col 17, Line 5).

Art Unit: 2623

Claims 71 and 81 are rejected wherein the “at least one option includes at least one of: recording a current program on the television channel, [and] setting a reminder for a future program on the television channel” (Lawler et al.: Col 13, Line 53 – Col 14, Line 48).

In consideration of claims 88 and 91, “at least one of the . . . option indicator is a generic icon” such as element [138] which generically indicates that the user may ‘order’ a program. The icon is considered generic’ in so far as the same icon is utilized to indicate to the user that programs can be ordered in numerous screens (Figures 8 and 9).

7. Claims 72-75 and 82-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering et al. (US Pub No. 2002/0026638 A1), in view of the “IBM Technical Disclosure Bulletin” (of record), in view of Matthews, III (US Pat No. 5,815,145), in view of Matthews, III et al. (US Pat No. 6,025,837), and in further view of Goldschmidt Iki et al. (US Pat No. 6,295,646).

In consideration of claims 72 and 82, the combined references are unclear with respect to whether or not “at least one of the cells” such as those corresponding to the television program listings region [101] of Eldering are operable to display Web content “within the cell”. In an analogous art pertaining to interactive television applications, the Goldschmidt Iki et al. reference discloses a user interface wherein “at least one of the cells is operable to display Web content within the cell” in addition to cells displaying television content (Figure 6; Col 7, Lines 28-51). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the combined references such that “at least one of the cells is operable to display Web content within the cell” for the purpose of advantageously providing a user interface/programming guide which

supports entertainment system data from a variety of sources (Goldschmidt Iki et al.: Col 1, Lines 15-36).

Claims 73 and 83 are rejected wherein “at least one of the cells is associated with a television channel and at least one of the cells is associated with a non-television entity”. (Goldschmidt Iki et al.: Col 7, Lines 40-51; Col 8, Line 66 – Col 9, Line 42).

Claims 74 and 84 are rejected wherein the method further comprise “receiving a signal indicating selection of the cell in focus; and if the cell in focus is associated with a television channel, displaying, in full screen on the display screen, video content being broadcast on the television channel” (Goldschmidt Iki et al.: Col 9, Lines 29-34).

Claims 75 and 85 are rejected wherein the system/method further “allows a user to disassociate a television channel from a cell; and allows a user to associate a television channel with a cell” in accordance with the user establishment of preferred entertainment sources (Goldschmidt Iki et al.: Col 7, Lines 40-46). Alternatively, the system/method “allows a user to disassociate a television channel from a cell; and allows a user to associate a television channel from a cell” in conjunction with the user scrolling through the listing of entries within the interface such that the first displayed cell would be associated a different channel if the user scrolled the listings as illustrated in Figure 6 of Matthews, III.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of

Art Unit: 2623

claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Knudson et al. (WO 99/56466 A1) reference discloses a program guide system with advertisements.
- The Alexander et al. (WO 99/04561 A1) reference discloses a system and method for displaying and recording control interfaces.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343. The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

Art Unit: 2623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott Beliveau  
Primary Examiner  
Art Unit 2623



SEB

October 11, 2006



**Notice of References Cited**

Application/Control No.

09/773,883

Applicant(s)/Patent Under  
Reexamination  
CARPENTER ET AL.

Examiner

Scott Beliveau

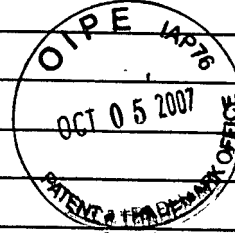
Art Unit

2623

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0026638	02-2002	Eldering et al.	725/42
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	WO 9956466 A1 ✓	11-1999	World Intellect	KNUDSON et al.	
	O	WO 9904561 A1 ✓	01-1999	World Intellect	ALEXANDER et al.	
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EVIDENCE APPENDIX C  
COPY OF REPLY TO FINAL OFFICE ACTION  
DATED JANUARY 18, 2007

DOCKET NO.

UV-180

CONFIRMATION NO.

7944

APPLICANTS

Kenneth F. Carpenter, Jr. et al.

APPLICATION NO.

09/773,883

FILED

January 18, 2007

RECEIPT IS HEREBY ACKNOWLEDGED OF THE  
Transmittal Form (in duplicate); and Reply to Office Action.



DATED

January 18, 2007

FILED IN CONNECTION WITH THE ABOVE CASE.

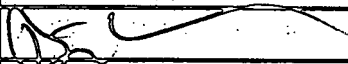
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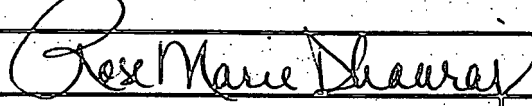
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/773,883
	Filing Date	January 31, 2001
	First Named Inventor	Kenneth F. Carpenter
	Art Unit	2623
	Examiner Name	Scott E. Beliveau
Total Number of Pages in This Submission	Attorney Docket Number	UV-180

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard.
<b>Remarks</b> The Director is hereby authorized to charge payment of any additional filing fees or surcharges required under 37 C.F.R. § 1.16 and § 1.17, in connection with the paper(s) transmitted herewith, or credit any overpayment of same, to Deposit Account No. 06-1075, (Order No. 003597.0180). A duplicate copy of this transmittal letter is transmitted herewith.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	FISH & NEAVE IP GROUP OF ROPES & GRAY	
Signature		
Printed name	Brian E. Mack	
Date	January 18, 2007	Reg. No. 57,189

CERTIFICATE OF TRANSMISSION/MAILING		
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as EXPRESS MAIL in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:		
Signature		
Typed or printed name	ROSE MARIE DHANRAJ	Date January 18, 2007


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/773,883
	Filing Date	January 31, 2001
	First Named Inventor	Kenneth F. Carpenter
	Art Unit	2623
	Examiner Name	Scott E. Beliveau
Total Number of Pages in This Submission	Attorney Docket Number	UV-180

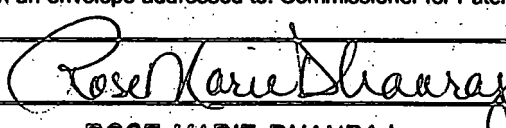
**ENCLOSURES** (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard.		
<table border="1"><tr><td>Remarks</td></tr><tr><td>The Director is hereby authorized to charge payment of any additional filing fees or surcharges required under 37 C.F.R. § 1.16 and § 1.17, in connection with the paper(s) transmitted herewith, or credit any overpayment of same, to Deposit Account No. 06-1075 (Order No. 003597.0180). A duplicate copy of this transmittal letter is transmitted herewith.</td></tr></table>			Remarks	The Director is hereby authorized to charge payment of any additional filing fees or surcharges required under 37 C.F.R. § 1.16 and § 1.17, in connection with the paper(s) transmitted herewith, or credit any overpayment of same, to Deposit Account No. 06-1075 (Order No. 003597.0180). A duplicate copy of this transmittal letter is transmitted herewith.
Remarks				
The Director is hereby authorized to charge payment of any additional filing fees or surcharges required under 37 C.F.R. § 1.16 and § 1.17, in connection with the paper(s) transmitted herewith, or credit any overpayment of same, to Deposit Account No. 06-1075 (Order No. 003597.0180). A duplicate copy of this transmittal letter is transmitted herewith.				

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	FISH & NEAVE IP GROUP OF ROPES & GRAY		
Signature			
Printed name	Brian E. Mack		
Date	January 18, 2007	Reg. No.	57,189

**CERTIFICATE OF TRANSMISSION/MAILING**

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Signature			
Typed or printed name	ROSE MARIE DHANRAJ	Date	January 18, 2007

UV-180

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Kenneth F. Carpenter, Jr. et al.  
Application No.: 09/773,883 Confirmation No.: 7944  
Filed : January 31, 2001  
For : INTERACTIVE TELEVISION APPLICATION  
WITH NAVIGABLE CELLS AND REGIONS  
Art Unit : 2623  
Examiner : Scott E. Beliveau

New York, New York 10020  
January 18, 2007

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REPLY TO OFFICE ACTION

Sir:

In reply to the Office Action dated October 18, 2006  
(hereinafter "Office Action"), applicants request  
reconsideration in view of the following remarks:

Remarks begin on page 2 of this paper.

REMARKS

I. Summary of Office Action

Claims 66-91 are pending in this application.

Claims 66-68, 76-78, 86, 87, 89, and 90 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eldering et al. U.S. Patent Pub. No. 2002/0026638 (hereinafter "Eldering") in view of the "IBM Technical Disclosure Bulletin" (hereinafter "IBM Bulletin"), in further view of Matthews, III U.S. Patent No. 5,815,145 (hereinafter "Matthews I"), and in further view of Matthews, III et al. U.S. Patent No. 6,025,837 (hereinafter "Matthews II").

Claims 69-71, 79-81, 88, and 91 were rejected under 35 U.S.C. §103(a) as being unpatentable over Eldering, in view of the IBM Bulletin, in further view of Matthews I, in further view of Matthews II, and in further view of Lawler et al. U.S. Patent No. 5,585,838 (hereinafter "Lawler").

Claims 72-75 and 82-85 were rejected under 35 U.S.C. §103(a) as being unpatentable over Eldering, in view of the IBM Bulletin, in further view of Matthews I, in further view of Matthews II, and in further view of Goldschmidt Iki et al. U.S. Patent No. 6,295,645 (hereinafter "Goldschmidt").

The rejections of claims 66-91 under 35 U.S.C. §103(a) are respectfully traversed.

II.      The Combination of Eldering, the IBM Bulletin, Matthews I, and Matthews II Fail to Show or Suggest All of Applicants' Claimed Features

Independent claims 66 and 76 are directed to a method and system for using an interactive application on a display screen to access content. At least two cells are provided on the display screen. Each of the at least two cells is operable to be associated with a television channel and to display, within the cell, video content being broadcast on the television channel. An indicator is displayed that notifies the user of the availability of interactive content associated with the television channel associated with the cell. The at least two cells are grouped into a region, and a region highlight is displayed that surrounds the cells in the region. A user is allowed to navigate the region highlight, wherein no cell highlight appears on the display while the user is navigating the region highlight. In response to a user selection of a region surrounded by the region highlight, a cell highlight is displayed around a cell in the selected region. The user is then allowed to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus. Finally, the user is allowed to access the interactive content associated with the television channel for a cell for which an indicator is displayed and which is in focus.



The Examiner contends that the combination of Eldering, the IBM Bulletin, Matthews I, and Matthews II shows all of applicants' claimed features recited in independent claims 66 and 76. (See Office Action, pages 4-10). Applicants respectfully disagree. Although the IBM Bulletin refers to a border around the frame of a web page, and Matthews I shows cursor 108 around programming tile 102a (see Mathews I, FIG. 4), none of the references, alone or in combination, shows or suggests displaying a cell highlight around a cell in the selected region in response to a user selection of the region surrounded by the region highlight, as recited by applicants' independent claims.

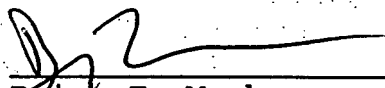
For example, a user of applicants' claimed invention may navigate between regions using a region highlight. While navigating between regions using the region highlight, no cell highlight appears on the display. Then, in response to a user selection of a highlighted region, a cell highlight is displayed around a cell in the selected region. The user may then navigate the cell highlight to other cells within the selected region. The Office Action, in combining the four references in a piecemeal fashion, has overlooked the claimed functionality of displaying a cell highlight around a cell in a selected region in response to a user selection of that region.

For at least the foregoing reason, applicants submit that independent claims 66 and 76 are allowable over Eldering, Matthews I, Matthews II, and the IBM Bulletin. Dependent claims 67-75 and 77-91, each of which includes all the limitations of its respective independent claim, are allowable for at least the same reason. Applicants respectfully request, therefore, that the rejection of claims 66-91 under 35 U.S.C. §103(a) be withdrawn.

III. Conclusion

Applicants respectfully submit that this application is in condition for allowance. Reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,



Brian E. Mack  
Reg. No. 57,189  
Agent for Applicants  
Fish & Neave IP Group  
Ropes & Gray LLP  
Customer No. 1473  
1251 Avenue of the Americas  
New York, New York 10020-1105  
Tel.: (212) 596-9000

**EVIDENCE APPENDIX D**  
**COPY OF ADVISORY ACTION DATED FEBRUARY 7, 2007**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/773,883

01/31/2001

Kenneth F. Carpenter JR.

UV-180

7944

1473 7590 02/07/2007

FISH & NEAVE IP GROUP  
ROPES & GRAY LLP  
1211 AVENUE OF THE AMERICAS  
NEW YORK, NY 10036-8704

## RECEIVED

FEB 12 2007

ROPES & GRAY LLP PATENT DEPT.  
REFERRED TO JMS/IRM  
NOTED BY                     

EXAMINER
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BELIVEAU, SCOTT E

ART UNIT	PAPER NUMBER
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2623

MAIL DATE	DELIVERY MODE
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02/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

File No. UV/180  
Action Desc Notice of Appeal / Action Action Resp.  
Due Date March 8, 2007  
By JS

**Advisory Action**  
**Before the Filing of an Appeal Brief**

Application No.

09/773,883

Examiner

Scott Beliveau

Applicant(s)

CARPENTER ET AL.

Art Unit

2623

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 18 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: \_\_\_\_\_.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

  
Scott Beliveau  
Primary Examiner  
Art Unit: 2623

Continuation of 11. does NOT place the application in condition for allowance because: applicant's arguments having been fully considered are not persuasive. Applicant argues that the none of the references either alone or in combination suggest displaying a cell highlight around a cell in the selected region in response to a user selection of the region surrounded by the region highlight. The IBM Bulletin describes providing a border around a frame that has 'input focus'. Having 'input focus' is understood to mean that the particular area or frame will have subsequent user input directed to that area/frame. Therefore, a particular region or frame must initially be accessed or 'selected' and thereby 'highlighted' in order for subsequent user input to be processed for that frame as opposed to other frames. Figure 4 of Matthews (I) illustrates the particular display of program listings subsequent to activation which includes the display of a 'cell highlight around a cell' that operates in accordance with the user input (Col 4, Lines 62 - Col 5, Line 5). "A cell highlight" is displayed depending on the user's input (Col 5, Lines 6-22). Therefore, taken in combination, the references disclose displaying a cell highlight around a cell in the selected region in response to a user selection of a highlighted region as argued.

SEB

**EVIDENCE APPENDIX E**  
**COPY OF PRE-APPEAL BRIEF REQUEST FOR REVIEW**  
**DATED APRIL 18, 2007**

DOCKET No.

UV-180 (003597-0180)

CONFIRMATION No.

7944

APPLICANTS

Kenneth F. Carpenter, Jr.

APPLICATION No. 09/773,883

FILED

January 31, 2001

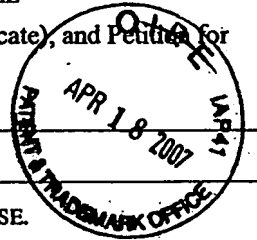
RECEIPT IS HEREBY ACKNOWLEDGED OF THE  
Pre-Appeal Brief Request for Review; Notice of Appeal (in duplicate), and Petition for  
Extension of Time Under 37 CFR 1.136(a) (in duplicate).

DATED

April 18, 2007

FILED IN CONNECTION WITH THE ABOVE CASE.

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BM/odv 003597-0180





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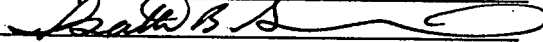
# **NOTICE OF APPEAL FROM THE EXAMINER TO THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Docket Number (Optional)  
**UV-180**

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on April 18, 2007

Signature



Typed or printed

name Isatta B. Smith

In re Application of  
**Kenneth F. Carpenter, Jr.**

Application Number  
**09/773,883**

Filed  
**January 31, 2001**

For INTERACTIVE TELEVISION APPLICATION WITH  
NAVIGABLE CELLS AND REGIONS

Art Unit  
**2623**

Examiner  
**Scott E. Beliveau**

Applicant hereby appeals to the Board of Patent Appeals and Interferences from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20 (b)(1))

**\$500.00**

- ☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by half, and the resulting fee is: \$ \_\_\_\_\_
- ☐ A check in the amount of the fee is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director has already been authorized to charge fees in this application to a Deposit Account. I have enclosed a duplicate copy of this sheet.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 06-1075, (Order No. 003597-0180). I have enclosed a duplicate copy of this sheet.
- ☒ A Pre-Appeal Brief Request for Review.
- ☒ A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/22) is enclosed.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)
- ☒ attorney or agent of record.  
Registration number 57,189
- ☐ attorney or agent acting under 37 CFR 1.34.  
Registration number if acting under 37 CFR 1.34. \_\_\_\_\_



Signature

**Brian Mack**

Typed or printed name

**212-596-9000**

Telephone number

**April 18, 2007**

Date

**NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.**

☒ \*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 41.31. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

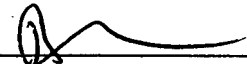
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/22 (09-06)

Approved for use through 03/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b> <b>FY 2006</b> <i>(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)</i>		Docket Number (Optional) UV-180 (003597-0180)																									
Application Number 09/773,883		Filed January 31, 2001																									
<b>For INTERACTIVE TELEVISION APPLICATION WITH NAVIGABLE CELLS AND REGIONS</b>																											
Art Unit 2623		Examiner Scott E. Beliveau																									
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<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b> <b>FY 2006</b> <i>(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)</i>		Docket Number (Optional) UV-180 (003597-0180)																									
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PATENTS  
UV-180

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Applicants : Kenneth F. Carpenter, Jr. et al.  
Application No. : 09/773,883 Confirmation No. : 7944  
Filed : January 31, 2001  
For : INTERACTIVE TELEVISION APPLICATION  
WITH NAVIGABLE CELLS AND REGIONS  
Art Unit : 2623  
Examiner : Scott E. Beliveau

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Pursuant to 1296 Off. Gaz. 2 (July 12, 2005), applicants request review of the rejection of claims 1-31 in the above-identified application. No amendments are being submitted with this Request. This Request is being filed with a Notice of Appeal.

Arguments begin on page 2 of this paper.

## ARGUMENTS

### I. Introduction

Claims 66-91 are pending in this application.

Claims 66-68, 76-78, 86, 87, 89, and 90 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eldering et al. U.S. Patent Pub. No. 2002/0026638 (hereinafter "Eldering") in view of the "IBM Technical Disclosure Bulletin" (hereinafter "IBM Bulletin"), in further view of Matthews, III U.S. Patent No. 5,815,145 (hereinafter "Matthews I"), and in further view of Matthews, III et al. U.S. Patent No. 6,025,837 (hereinafter "Matthews II").

Claims 69-71, 79-81, 88, and 91 were rejected under 35 U.S.C. §103(a) as being unpatentable over Eldering in view of the IBM Bulletin, in further view of Matthews I, in further view of Matthews II, and in further view of Lawler et al. U.S. Patent No. 5,585,838 (hereinafter "Lawler").

Claims 72-75 and 82-85 were rejected under 35 U.S.C. §103(a) as being unpatentable over Eldering in view of the IBM Bulletin, in further view of Matthews I, in further view of Matthews II, and in further view of Goldschmidt Iki et al. U.S. Patent No. 6,295,645 (hereinafter "Goldschmidt").

### II. Applicants' Reply to the 35 U.S.C. § 103(a) Rejections

Independent claims 66 and 76 are directed to a method and system for using an interactive application on a display screen to access content. At least two cells are provided on the display screen. Each of the at least two cells is operable to be associated with a television channel and to display, within the cell, video content being broadcast on the television channel. An indicator is displayed that notifies the user of the availability of interactive content associated with the television channel associated with the cell. The at least two cells are grouped into a region, and a region highlight is displayed that surrounds the cells in the region. A user is allowed to navigate the region highlight, wherein no cell highlight appears on the display while the user is navigating the region highlight. In response to a user selection of a region surrounded by the region highlight, a cell highlight is displayed around a cell in the selected region. The user is then allowed to navigate the cell highlight to each of the cells in the selected region, wherein only the cell that is surrounded by the cell highlight is in focus. Finally, the user is allowed to access the interactive content associated

with the television channel for a cell for which an indicator is displayed and which is in focus.

A. The Examiner's Reasons for Combining the References  
In Fact Would Not Motivate One Skilled in the Art To Make  
The Suggested Combination Because They Lack a Rational  
Basis and Are Inapplicable to the Teachings of the References

Even assuming *arguendo* that the combination of Eldering, the IBM Bulletin, Matthews I, and Matthews II showed all of applicants' limitations recited in independent claims 66 and 76, the Office Action has still failed to meet its burden of establishing a *prima facie* case of obviousness because the motivations proffered in the Office Action lack any basis in fact and are inapplicable to the references.

The Office Action contends that it would have been obvious to modify Eldering to include the region highlight of the IBM Bulletin. *See* Office Action, page 5. The Office Action also contends that it would have been obvious to allow a user to navigate the newly added region highlight to a region in Eldering, wherein no cell highlight appears on the display while the user is navigating the region highlight. *See id.* The Office Action's purported motivation for making both of these modifications to Eldering is to "provid[e] feedback to the user as to which frame/region within the interface has input focus." *See* Office Action, p. 5. Applicants respectfully disagree and submit that the record is completely devoid of any reason why one skilled in the art would be motivated to modify Eldering in such a way as to add a region highlight or allow a user to navigate the newly added region highlight between regions.

Eldering merely states that different portions of the EPG may "comprise different frames in a frameset" (*Eldering*, ¶ 0040). Eldering is silent as to how a user navigates among the different windows within the EPG or even if the individual windows are selectable or navigable by the user. *See Eldering*, ¶¶ 0032, 0040-0044. Thus, the Examiner must initially modify Eldering—which the Examiner has not done—to make the windows navigable before the Examiner can even begin reasoning that a frame highlight is needed. But ignoring this fact, the Examiner's purported motivation of "providing feedback to the user as to which frame/region has input focus" is wholly inadequate to motivate one skilled in the art to navigate the Eldering EPG display by region using a region highlight. There are simply no navigable cells groupings in Eldering compatible with a region highlight. Each window is a single element. Eldering's discussion about frames at best puts each element within a different frame on a web page. There is no suggestion or teaching of multiple element frames. This is significant because, assuming a highlight were used within such an

embodiment, an element by element highlight would be used to provide focus, not a region highlight. In short, there is no need for a region highlight when there are no regions of multiple cells. The Examiner's motivation is patently inapplicable here.

The Office Action's motivation to combine Eldering and the IBM Bulletin with Matthews I is equally deficient and unsupported by the references themselves. The Office Action merely contends that it would have been obvious to include the navigable region highlight of the Eldering/IBM Bulletin combination into the FIG. 4 display screen of Matthews I "for the purpose of taking advantage of the graphics-based nature of IT systems in association with the presentation of program guide services." See Office Action, p. 6. As discussed below, this motivation is far too conclusory to be sufficient as a matter of law. In addition, adding a region highlight to the FIG. 4 display screen of Matthews I is contrary to the very teachings of the Matthews I reference itself.

Matthews I approaches the problem of navigable regions in a completely different way—a way that negates the need for a region highlight. Namely, as shown in FIG. 6, a user in Matthews I may navigate a cursor within a programming tile strip (i.e., programming guide space 150 of FIG. 6) to cause "screen 98 to shift leftward in the programming guide space" (Matthews I, col. 10, ll. 11-25). Thus, screen 98 of FIG. 4 only displays one region (e.g., of six tiles) of a larger virtual display at a time—the region selected by the cursor in programming guide space 150. Since only one region is displayed in screen 98 at a time, there would be no reason for one skilled in the art to add a region highlight to navigate between regions in the display screen. Because Matthews I already provides a solution for navigating and selecting a grouping of programming tiles for display using the programming tile strip, the need for a region highlight is completely eliminated. Indeed, Matthews I would have to be completely redesigned to work with a region highlight.

Contrary to the Office Action's contention, applicants respectfully submit that there could be no possible motivation to include the region highlight from the Eldering/IBM Bulletin combination into screen 98 of Matthews I. The region highlight would serve no purpose nor add any functionality that does not already exist in Matthews I. Rather, applicants have recited a unique approach for grouping cells into regions and navigating between the regions using a region highlight in independent claims 66 and 76.

B. The Examiner's Motivation to Combine the  
References Is Insufficient as a Matter of Law

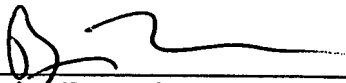
Applicants also submit that the motivation proffered by the Examiner for combining the references is insufficient as a matter of law. It is well-settled that in order to

sustain a rejection under 35 U.S.C. § 103, the Examiner must point to some "objective teaching" to combine the references. *See, e.g., In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). The Examiner's dubious motivation of "taking advantage of the graphics-based nature of IT systems" is overly broad and generic. The mere fact that a system may be graphics-based does not specifically teach one skilled in the art to modify the references, especially not in the way the Examiner proposes. "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence'" of a motivation to modify the references. *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999), abrogated on other grounds by *In re Gartside*, 53 USPQ2d 1769 (Fed. Cir. 2000). Rather, if the 35 U.S.C. § 103 rejection is to be maintained, the Examiner must provide some specific teaching in the references themselves or in the knowledge of one skilled in the art why one would be motivated to modify or combine the references. *See generally* MPEP § 2143. As shown above, one skilled in the art would have no motivation to combine any of the references in the way proffered by the Examiner. Accordingly, applicants request that the rejection under 35 U.S.C. § 103 be withdrawn.

### III. Conclusion

For the foregoing reasons, applicants submit that independent claims 66 and 76 are allowable over the prior art of record. Dependent claims 67-75 and 77-91, which contain all the limitations of independent claims 66 and 76, respectively, are allowable for at least the same reasons. Reconsideration and allowance are respectfully requested.

Respectfully submitted,

  
\_\_\_\_\_  
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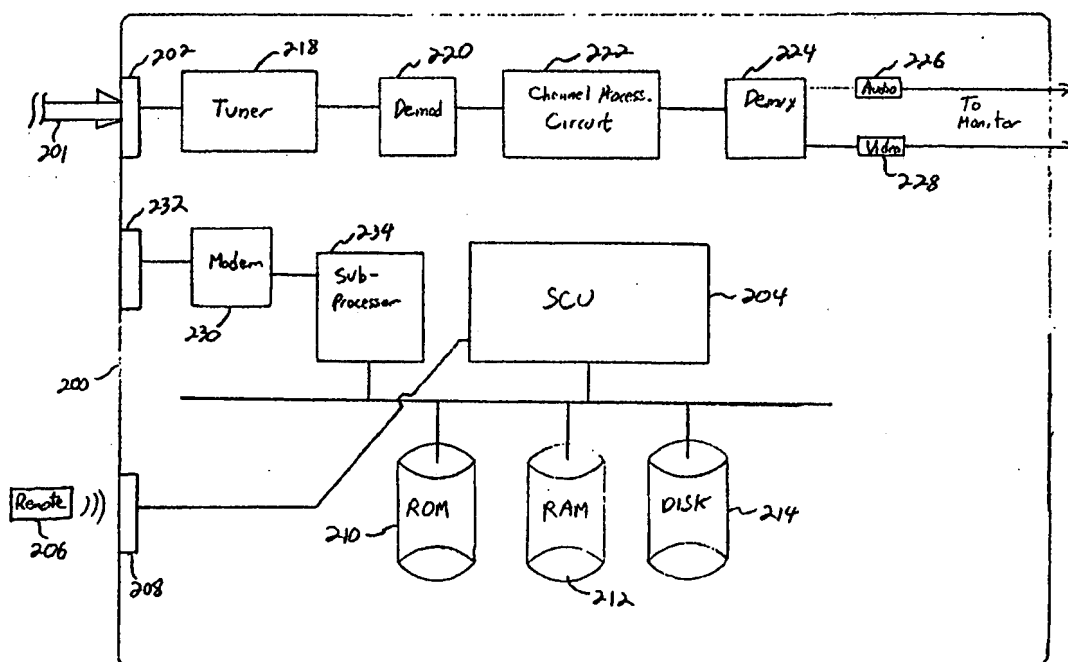
EVIDENCE APPENDIX F  
COPY OF ELDERING ET AL. U.S. PATENT APP. PUB. NO.  
2002/0026638 A1



US 20020026638A1

(19) **United States**(12) **Patent Application Publication**  
Eldering et al.(10) Pub. No.: **US 2002/0026638 A1**(43) Pub. Date: **Feb. 28, 2002**(54) **INTERNET-BASED ELECTRONIC  
PROGRAM GUIDE ADVERTISEMENT  
INSERTION METHOD AND APPARATUS****Related U.S. Application Data**(63) Non-provisional of provisional application No.  
60/229,156, filed on Aug. 31, 2000.(76) Inventors: **Charles A. Eldering**, Doylestown, PA  
(US); **Kyle Mehling**, Buckingham, PA  
(US)**Publication Classification**(51) Int. Cl.<sup>7</sup> ..... G06F 3/00; H04N 5/445;  
G06F 13/00

(52) U.S. Cl. .... 725/42

Correspondence Address:  
**EXPANSE NETWORKS, INC.**  
300 NORTH BROADSTREET  
DOYLESTOWN, PA 18901 (US)(21) Appl. No.: **09/742,506**(22) Filed: **Dec. 21, 2000**(57) **ABSTRACT**The invention is a method and apparatus for delivering  
targeted Internet-based advertising for insertion into adver-  
tisement portions of an electronic program guide display for  
television.



US 20020026638A1

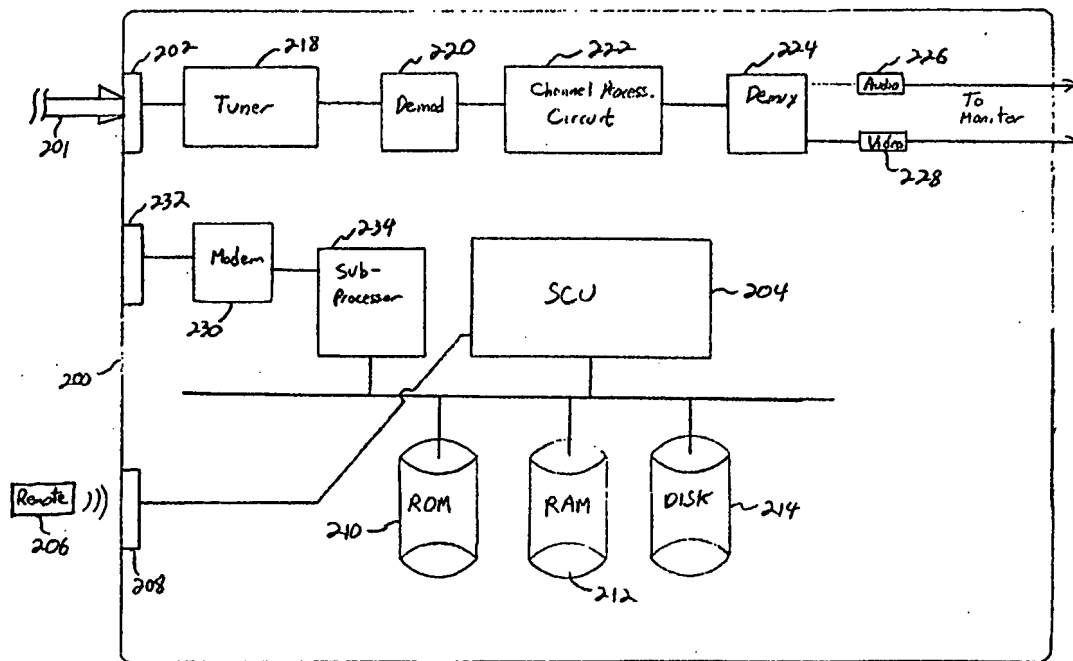
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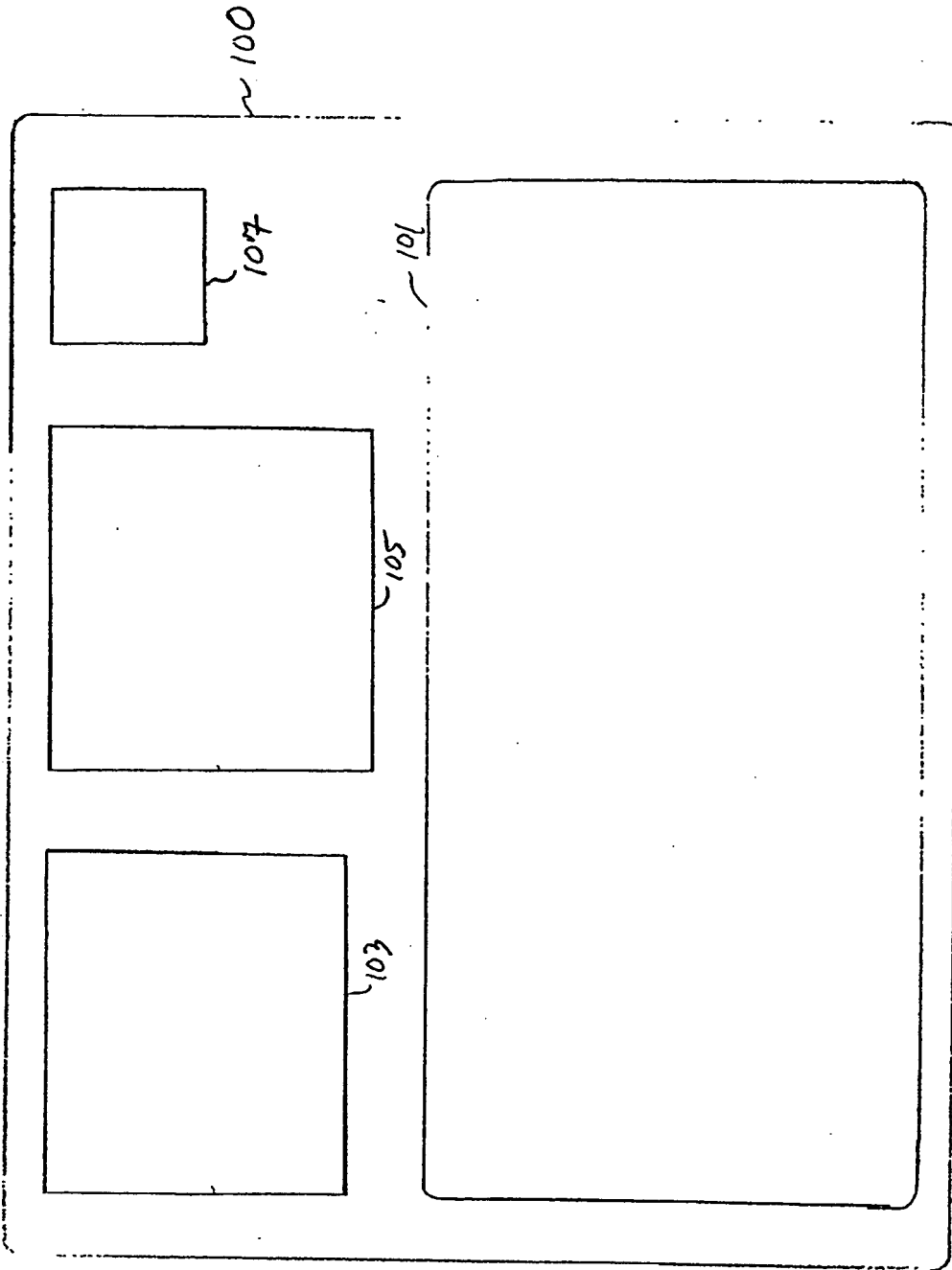


Fig. 2

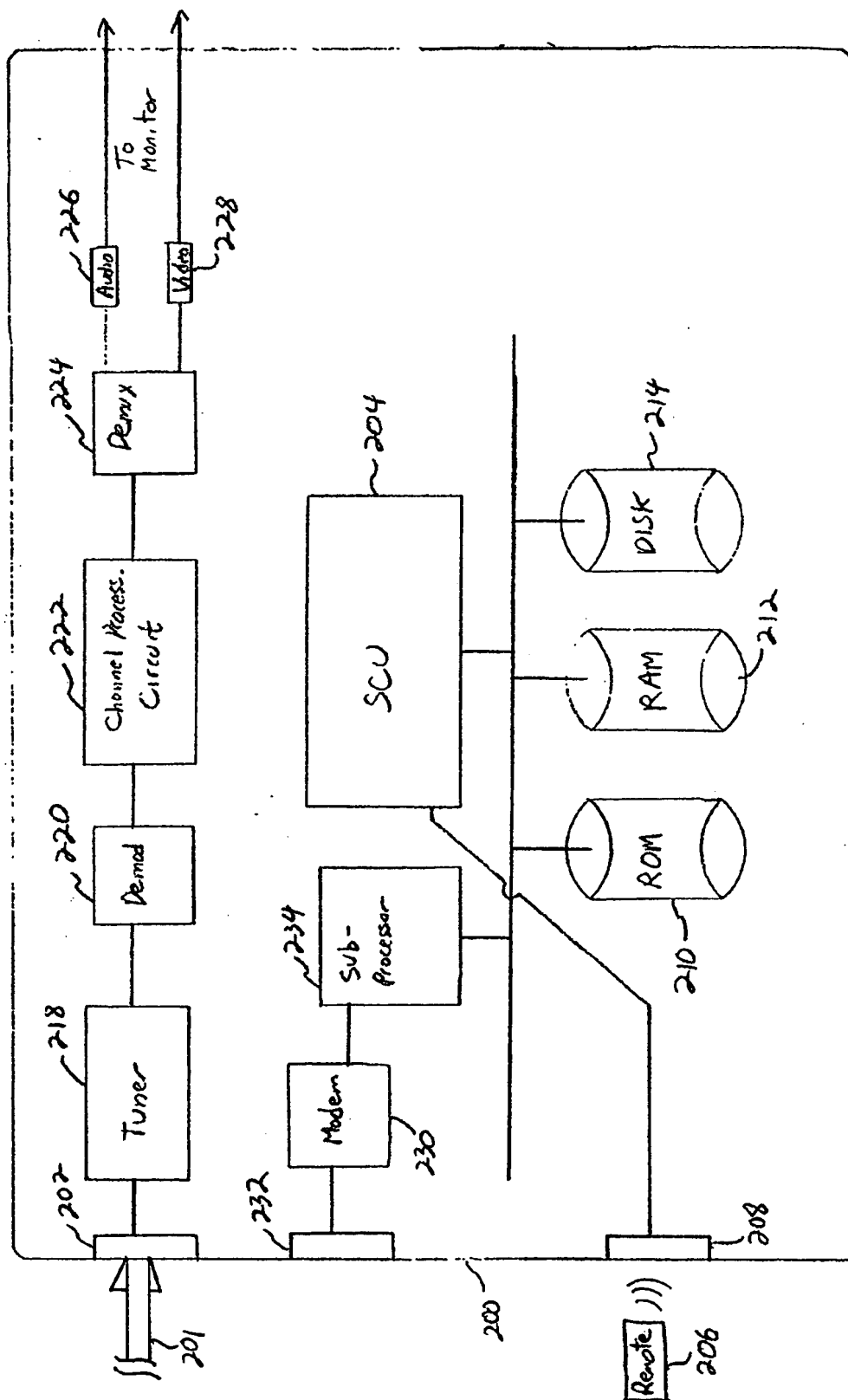


Fig. 2

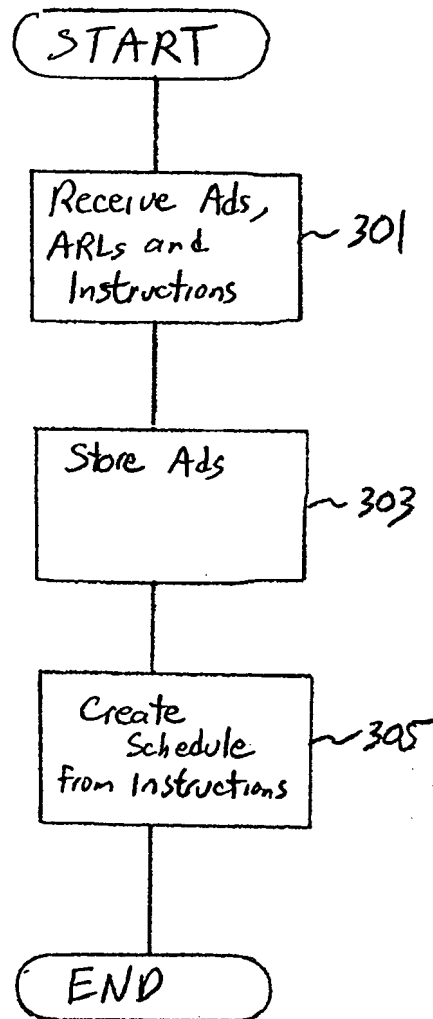


Fig. 3

## INTERNET-BASED ELECTRONIC PROGRAM GUIDE ADVERTISEMENT INSERTION METHOD AND APPARATUS

[0001] This patent application claims priority of U.S. Provisional Application No. 60/229,156 filed on Aug. 31, 2000 entitled "Method and System For Addressable and Program Independent Advertising" which is incorporated herein by reference.

### FIELD OF THE INVENTION

[0002] The invention pertains to television advertising. More particularly, the invention pertains to advertising in the electronic program guide (EPG) of a television service delivery system.

### BACKGROUND OF THE INVENTION

[0003] Electronic Program Guides (EPGs) are well known in the television service delivery system field. As used herein, the term "television service delivery system" refers to any known or future method and/or apparatus for delivering television programming to viewers, including, but not limited to, digital broadcast satellite (DBS), analog cable, digital cable, switched digital video (SDV) delivered by a telephone service, and land-based radio frequency antenna broadcast.

[0004] The various modes of delivering television service, including those mentioned in the preceding sentence are herein termed transport mechanisms or transport streams. The term "television service provider" refers to entities that provide television service delivery systems. The term "subscriber" refers to any individual, household or other entity that receives television service delivery from a television service provider. In almost all possible television service delivery systems other than land based antenna broadcast, the subscriber actually enters into a service contract with the television service provider in order to subscribe to the television service. In land-based antenna service, anyone with a television in the geographic area reached by the antenna can receive the television service without any contract with the broadcaster. Nevertheless, in this specification, the term subscriber is intended to include such entities.

[0005] An electronic program guide is a listing which can be displayed on the monitor (e.g., television) of a subscriber that displays a listing of the programs that are being offered on the various television channels of the system.

[0006] Most contract-based television service delivery systems, such as analog cable, digital cable, digital broadcast satellite (DBS), and switched digital video (SDV), include an EPG.

[0007] Normally, individuals receiving their television service via radio frequency broadcast using earth-based antennae do not have access to an EPG since there is no centralized television service provider, but rather, they simply receive whatever signals are being broadcast in their geographic by individual television stations (i.e., individual television channels). However, it certainly is possible for a broadcaster to broadcast an EPG showing the programming available through land-based antennae broadcast in a particular geographic area on one of the otherwise unused radio frequency broadcast channels received for television.

[0008] In analog cable television networks, the EPG is typically provided in one of the channels and comprises a scrolling screen showing the television program channels available through the cable network presently and for the next few hours on those channels.

[0009] In more recently developed television service delivery systems such as digital cable, SDV and DBS, the EPG also may be received in one communication channel of the television service transport stream. In other systems, EPG data for a certain amount of time (e.g., one week) may be downloaded intermittently to a memory at the subscriber node and the interaction would be between the subscriber and the local memory.

[0010] Many EPGs are interactive such that a subscriber might be able to select a particular item in an EPG using his remote control unit in order to be provided additional information pertaining to that item. For instance, a user may position a cursor over an icon for a particular channel in order to obtain the programming information for that particular channel.

[0011] Normally, in the EPG, only a portion of the viewing area of the EPG is consumed with programming information. Typically, a portion of the screen is reserved for advertising. Particularly, one or more windows in the screen display advertisement which may comprise still picture advertising as well as moving picture advertising. Moving picture advertisements usually also include audio.

[0012] The advertisements displayed in the advertisement portion of the EPG display typically are included as part of the information transmitted in the channel (i.e., the EPG and ads comprise one signal).

[0013] PCT Publication WO 00/21287, which is incorporated herein by reference, relates to advertising in EPGs and discloses a method and apparatus for supplying video clips to viewers and displaying video advertising in EPGs.

[0014] Traditionally, a television service provider transmitted the same data to all of its subscribers.

[0015] However, modern digital television service methods, including SDV and digital cable, allow for the possibility of sending different data to different subscribers of the same provider. Theoretically, SDV allows different information to be sent to any individual subscriber. While in SDV, this can be accomplished by transmitting data to individual subscribers, the same can be accomplished in digital cable, either by sending different data to each subscriber over a data channel such as that which can be provided using a cable modem, or by broadcasting the data over a carousel and having each digital set-top pick off the appropriate information. The term addressable units is used herein to designate the nodes of the communication system that are individually addressable (e.g., each subscriber's STB in SDV or a local node in digital cable) such that different data can be sent to them.

[0016] This ability to more individually target subscribers is of great interest to advertisers, since it presents an opportunity to send different advertising to different subscribers or groups of subscribers. Thus, correlating addressable groups of subscribers with demographic data or the like can allow advertisers the opportunity to transmit advertisements to a more select group of television viewers

corresponding to their target audience. For instance, a cable television provider can sell advertising spots in the television programming delivered to its more affluent subscribers to different advertisers than its less affluent subscribers. Thus, the cable television network operation, in essence, could sell the same advertisement spot to two or more advertisers with each advertiser still reaching most, if not all, of its intended audience.

[0017] Many of the digital television service methods (digital cable, DBS, SDV) as well as analog cable television services require the use of a set top box (STB) coupled between the subscribers' television monitor or monitors and the transport mechanism (e.g., the cable in the case of analog or digital cable, the telephone line in the case of SDV, or the satellite receiving antenna in the case of DBS). In many SDV, DBS and digital cable systems, two-way communication between a subscribers' set top box and the service provider (hereinafter the head end) is possible. The upstream information flow (from the set top box to the head end) may be through the same transport mechanism as the downstream flow or may be a completely different mechanism. For instance, in DBS, the downstream information is received via satellite antenna reception. However, typically, the upstream information is sent to the head end through the telephone lines. Further, depending on the particular system, the service provider can send different data to different subscribers either by group or individually. One of the advantages of the ability to more specifically address subscribers is the ability to deliver more narrowly targeted advertising to individuals or groups of individuals.

[0018] Accordingly, it is an object of the present invention to provide an improved electronic program guide.

[0019] It is another object of a present invention to provide a method and apparatus for delivering targeted advertising to television subscribers.

[0020] It is a further object of the present invention to provide a method and apparatus for delivering targeted advertising to an EPG of a television subscriber that is simple, quick, reliable and can be readily updated.

#### SUMMARY OF THE INVENTION

[0021] In accordance with the invention, advertisements (ads) for display in an EPG are in an Internet based format such as HTML and are downloaded at the addressable units from a network, such as the Internet. In at least one preferred embodiment, the ads are downloaded and stored locally at a memory associated with the addressable units. Alternately, they may be downloaded in real time from a remote node of the television service delivery network at the time of display.

[0022] In either case, an EPG ad queue can be maintained in RAM at the addressable unit, the queue containing an ordered list of advertisement identifiers. The advertisement identifiers may comprise URLs on the World Wide Web.

[0023] The EPG itself also may be Internet based and delivered to the addressable units in the same manner as the ads, e.g., through the Internet.

[0024] Delivery of the advertisements and/or EPG may be through a separate transport stream than the television programming transport stream. For instance, in digital cable and SDV, one of the channels in the transport stream may be dedicated to Internet access or even just advertising via Internet access. In analog cable, the Internet based adver-

tisements and/or EPG may be retrieved through a DOCSIS (data over cable) channel carried on the cable using a DOCSIS modem in the subscriber set-top box. In DBS systems, the advertisement may be provided through a channel transmitted from the satellite itself or through a completely separate transport stream, for example, the telephone lines.

[0025] The addressable units can be preprogrammed to download and organize the advertisement identifiers in the queue in accordance with a predetermined scheduling algorithm. Alternately, they may be programmed to receive scheduling instructions intermittently from a head end. The scheduling algorithms can include the order in which the ads will be displayed, the position of the ads in the EPG (if the EPG supports multiple, simultaneous ad windows), and the duration that the ads will be shown.

[0026] Preferably, the scheduling algorithm determines when the EPG is being displayed and displays advertisements only when the EPG is being viewed.

[0027] The advertisements may comprise streaming video and/or streaming audio files embedded within Internet based files.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0028] FIG. 1 is a diagram of an EPG.

[0029] FIG. 2 is a block diagram of an exemplary set top box in accordance with the present invention.

[0030] FIG. 3 is a flow diagram illustrating the steps involved in downloading EPG advertisement queue in accordance with an embodiment of the present invention.

[0031] FIG. 4 is a flow diagram illustrating the steps involved in inserting advertisements into the EPG in accordance with an embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE INVENTION

[0032] FIG. 1 is a screen shot of a typical EPG 100. It comprises an area (or window) 101 for displaying program information for the multiplicity of channels of television service provided by the television service provider. It further includes one or more windows 103, 105, 107 for displaying advertisements in the EPG. The advertisements may be static (in the nature of a billboard) or moving picture (with or without accompanying audio).

[0033] The television service delivery system may comprise any type of communication system, such as a digital cable network, an analog cable network, a DBS communication system, and an SDV network using the phone lines and VDSL modems.

[0034] In the prior art, typically, the entire EPG 100, including advertisements, is created at the head-end by the television service provider and transmitted to the subscribers via the communication systems in one of the channels of the system.

[0035] However, in accordance with the present invention, the EPG advertisements comprise Internet based data files (e.g., web pages) transmitted to the addressable units separately from the television programming.



[0036] The term "internet based" as used herein is intended to encompass all of the computer languages, file formats, and protocols commonly used in connection with Web pages on the World Wide Web and accessed through the Internet. This includes, but is not limited to, HTML, SGML, XML, XHTML, Dynamic HTML, Style Sheets (e.g., CSS1 and CSS2), and Javascript languages. It also is intended to encompass multimedia and other types of files that can be embedded within or associated with Web pages, such as, but not limited to MPEG, AVI, RAM, RM, QuickTime, Real Audio, Real Video, Windows Media, Java (e.g., Java applets), Javascript, ActiveX, SMIL 1 (Synchronized Multimedia Integration Language) Flash, MP3, WAV, AU, MIDI, MID, EPS, VRML, JPEG, GIF, and AAC files.

[0037] The ads for display in an EPG can be coded in any industry standard, Internet-readable format that would allow for viewing of the ads via software from a hardware-independent addressable unit. Similar to a web-browser, the addressable unit will be able to process and display a wide range of file types that would include but are not limited to: HTML and its various implementations of displaying text and graphics, as well as multimedia files, both standalone or embedded in HTML such as Java, Flash, RealMedia, compressed video in its various implementations (e.g., MPEG, AVI, RAM, RM, QuickTime) and compressed audio in its various implementations (e.g. MP3, WAV, AU, AAC).

[0038] The transport mechanism for the Internet-based advertisements may be the same as for the television programming (i.e., a separate channel in the same transport stream). For example, in an analog cable television service delivery network, the ads can be transmitted to the set-top box over a DOCSIS channel transported over the cable. Alternately, the ads may be delivered via an entirely separate transport mechanism. For example, in DBS, the ads may be received via an Internet connection through the telephone lines.

[0039] The advertisement files may comprise HTML pages that include streaming video and/or streaming audio files embedded therein. The guide portion 101 of the EPG also may be an Internet based file.

[0040] The ads may be transmitted to the addressable units in advance and stored locally at the addressable units for later retrieval for insertion into the EPG. Alternately, the ads may be retrieved in real time at or just prior to the time of display. The addressable units include circuitry for inserting the ads into the EPG in real time. In certain embodiments, the advertisements and the guide portion of the EPG may be combined to form a single HTML file. In other embodiments, the guide portion and the advertisements may each comprise different frames in a frameset in a manner that would be understood by persons of skill in the art of Web page design and implementation.

[0041] The addressable units would be programmed or otherwise designed to receive and/or store the appropriate ads, retrieve the ads at the appropriate time, and insert the ads into the EPG. The addressable units also should generate and maintain a schedule for inserting the ads into the EPG. This scheduling algorithm may be pre-programmed into the addressable unit or may be changeable via instructions received from the head end periodically.

[0042] Some advantages of real time ad delivery are that there is no need for extra memory at each subscriber's node for storing the ads, which may comprise very large files,

especially if they include streaming media files. Further, any changes that the advertiser wishes to make to the ads, including substituting an entirely new ad for an older one, can be made on the advertiser's server without the need to re-load the subscriber's memory.

[0043] The ads can be retrieved from the memory for display and/or retrieved in real time for display according to any reasonable scheduling algorithm. For instance, ads may be rotated for display with a changeover occurring at pre-designated intervals. Alternately, certain ads may be displayed at certain times of day. In accordance with another embodiment, if the individual addressable units are the STBs of the individual subscribers, ads may be rotated after a certain period of time that they have been displayed on the monitor. In such embodiments, the scheduling algorithm would include some means of determining whether the ads are displayed on the monitor.

[0044] In a simple embodiment, one may assume that, if the set top box is tuned to the EPG channel, it is being viewed. Accordingly, in such an embodiment, the ads can be rotated after a certain period of time that the EPG channel has been tuned in. However, those of skill in the art will understand that the fact that a set top box is tuned to the EPG channel does not mean that someone is viewing it. Particularly, persons often forget to turn off their set top boxes after they turn off their television monitors. Even further, sometimes subscribers leave the television on while they are not in the room. Thus, in more complex embodiments, EPG tuning detection may be combined with other means of determining whether the television monitor is on or even whether someone is viewing it. There are a number of methods which can be used to determine, probabilistically, whether an individual is viewing a turned-on television set. For instance, an algorithm can be developed in which it is assumed that no one is viewing the EPG even if the television is on and the EPG channel is tuned in if a certain amount of time has elapsed since a remote control command has been received by the set top box.

[0045] Furthermore, there are several means by which it may be determined whether the TV monitor is on. For instance, if the television is plugged into a power outlet of the set top box, the set top box can simply detect whether sufficient current is running to the television to indicate that it is on. Alternately, a horizontal oscillator detector can be incorporated into the set top box and used to provide a probabilistic determination of whether there is a TV on in the vicinity of the STB by detecting horizontal oscillation output of a typical television. Another potential method is to provide a detector for detecting the high voltage chroma subcarrier common to an operating television. U.S. patent application Ser. No. \_\_\_\_\_ (Attorney Docket No. P-24, 475) entitled "Method and System for Addressing Targeted Advertisements Using Detection of Operational Status of Display Device", invented by John Blasko et al., filed on or about Dec. 7, 2000, and assigned to the same assignee as the present application discusses various methods and apparatus for detecting when a television is on for targeted advertising purposes and is incorporated herein by reference.

[0046] In at least one embodiment, the identity and order of the ads which are to be displayed in the advertising portions of the EPG screen are stored in a queue in RAM at the addressable unit. At a simple level, the individual entries

in the queue may simply comprise the location of the file comprising the advertisement (hereinafter termed advertisement resource locator or ARL), and the ads can be retrieved in accordance with an order of the ARLs in the queue. In the case of local storage, the ARL would be a memory address in the local memory. The ARL may be a URL (Uniform Resource Locator) of the ad on the World Wide Web.

[0047] Once an ad file is retrieved, it can be inserted into a portion of the EPG display screen in any reasonable manner. Several methods and apparatus for splicing visual information into a video/audio stream are known in the prior art. For instance, if the EPG itself is HTML based, the advertisements could simply be inserted as subwindows in the viewing area in any of several well-known manners, such as by using frames in a frameset, which would be readily familiar to those skilled in Web page design and programming. Alternately, technology is presently available for inserting advertisements within another video display. For instance, the same technology which is now often used in television broadcasts of sporting events in which virtual billboards are inserted in the background or a virtual first down line is inserted on a football field can also be applied to insert the advertisements into the EPG in accordance with the present invention. Such technology is available, for instance, from companies such as Princeton Video Insertion.

[0048] Using Internet-based advertising as disclosed herein provides many advantages not possible in standard television advertising methods. First, a transport mechanism for delivering the advertising to households is readily available, namely, the Internet and telephone system. Second, targeted advertising can be delivered to subscribers without the need for any addressability in the transport mechanism for the actual television programming (or EPG). All that is necessary is a connection to the Internet (or any other network) and an STB (or other addressable unit) with the capability of inserting display elements into another display.

[0049] In accordance with the invention, the television service provider sells places in the electronic program guide of the viewers corresponding to the addressable units to advertisers based on available information about the corresponding subscribers. Such information may include publicly available demographic and psychographic information, as well as more individualized information which may be obtained through questionnaires filled out by subscribers.

[0050] In accordance with the invention, a virtual road-block can be set up whereby the subscriber will receive the designated ads in the designated order regardless of when the subscriber views the electronic program guide. In this manner, advertisers can more specifically reach their target audience while also being given a much higher level of confidence that their ads have actually been viewed by the target audience.

[0051] FIG. 2 is a block diagram illustrating a set-top box in accordance with the present invention and assuming that the pertinent television delivery service system supports individual addressing of STBs. FIG. 2 does not necessarily show all of the components of a set-top box but primarily only those that are relevant to the present invention. For exemplary purposes, the set top box 200 of FIG. 2 is a set top box for a digital cable network television service delivery system. Most of the components would exist in a set top box for most other television service delivery systems in any

event. Further, we will assume for exemplary purposes that the EPG is transmitted to the STB in one of the channels of the digital cable transport stream.

[0052] Set-top box 200 includes an input port 202 for coupling to the input signal.

[0053] The input signal comprises a stream of television programming comprising multiple channels. The set-top box includes a system control unit 204 that controls operation of the components of the STB. The system control unit 204 essentially is a central processing unit (CPU) and may comprise any digital processing device, such as a microprocessor, finite state machine (FSM), digital signal processor (DSP), application specific integrated circuit (ASIC), a programmed general purpose computer, etc.

[0054] The system control unit 204 receives commands from the subscriber, such as through infrared (IR) reception of commands from a hand held remote control unit 206 through an IR receiving circuit 208, decodes the commands, and forward control signals to other circuits in the set-top box 200 in order to carry out the subscriber's command. Such commands might include channel selection, volume control, and on/off. The STB further includes a read only memory (ROM) 210 containing fixed software instructions and fixed data for operating the STB, and a random access memory (RAM) 212 for storing changeable data, such as the queue, instructions for organizing the queue, and advertisements in accordance with the present invention. Preferably, STB 200 also includes a separate large volume memory device 214, such as a hard disc drive or optical disc drive which can be used instead of the RAM for storing files which are very large in size, such as television programs or streaming audio/video advertisements.

[0055] The SCU 204, ROM, 210, RAM 212, and large volume memory 214 are coupled to a master bus 216 over which the units can communicate with each other.

[0056] The input signal from input port 202 is passed through a tuning circuit 218. Under control of the system control unit 204, the tuning circuit selectively parses out the data corresponding to the particular channel selected by the viewer. The tuned channel is passed to a demodulator 220 that demodulates the data.

[0057] A channel processing circuit 222 takes the demodulated channel data and processes it as needed. The necessary channel processing depends on the particular form of the input data and the features of the STB. In some instances, very little, if any, processing is necessary. In others, significant processing may be necessary. In the case of an EPG channel in accordance with the present invention, at least one of the functions performed by the channel processing circuit 222 is the insertion of the ads into the EPG. Other exemplary functions that might be performed in the channel processing circuit 222 include decoding and encoded data streams (e.g., MPEG, Dolby SurroundSound™). The channel processing circuit may take any reasonable form. It should be understood that the term circuit is used in this specification inclusively to encompass analog circuits and digital circuits, including finite state machines, digital signal processors, computers, central processing units, ASICs, and programmed general purpose processors. Most likely, the channel processing circuit is a digital processor and, in fact, may comprise the same processor that comprises the SCU 204.

[0058] If any of the data received from the input port 202 is to be stored locally at the STB, the channel processing circuit 222 can pass that data to one of the memory devices 212 or 214 for storage through the system control unit 204.

[0059] The output of the channel processing circuit 222 typically is coupled to a de-multiplexer 224 which separates the audio and video portions of the channel and forwards them to audio and video output ports 226 and 228, respectively. These ports normally would be coupled to the audio and video input ports, respectively, of the subscriber's television.

[0060] In the particular embodiment illustrated in FIG. 2, the advertisements for insertion in the advertisement areas of the EPG are received via a different transport stream from the television programming channels and, particularly, via the Internet through the telephone lines 229 and a modem 230. It should be understood by persons of skill in the art that this is merely an example and that the advertisements, ARLs and queue organization instructions may be received by other means, such as in a dedicated channel in the main transport mechanism 201.

[0061] The STB further includes a subprocessor 234, coupled between the modem and the SCU 204. In this particular embodiment, the advertisements, ARLs and instructions for organizing the queue are received via the Internet via modem 230. The sub-processor 234 is dedicated to processing Internet based files, running file transfer protocol (FTP) for receiving streaming audio, streaming video and other files, receiving instructions from the head end for schedule generation in accordance with the instructions received from the head end. In this embodiment, we will assume that the advertisements are downloaded ahead of time and stored locally in memory 214 for retrieval at the time of insertion. Accordingly, modem 230 receives Internet based files. They are processed in the subprocessor 234 and stored in the large volume memory 214. Modem 230 also receives ARLs and instructions for generating a schedule for EPG ad insertion. As previously noted, the ARLs may comprise URLs on the World Wide Web.

[0062] The exact manner in which ads, ARLs and/or instructions are received can take many forms. For instance, the modem may connect directly via the telephone lines to a server maintained by the television service provider to retrieve such information. Alternately, the modem may be connected to an Internet service provider (ISP) and the modem can connect to the television service provider's Internet server via the Internet. If the modem is coupled to a dedicated line, the server may simply send instructions, ads and ARLs addressed to the particular STB at predesignated intervals. If the modem is connected to a non-dedicated line, the STB may be programmed to call in to the server (whether through the Internet or directly) at predetermined intervals to request a download of such information. Aforementioned U.S. Provisional Patent Application No. 60/229,156 and U.S. patent application Ser. No. \_\_\_\_\_, filed on or about Nov. 14, 2000, entitled "Queue Based Advertisement Scheduling and Sales", invented by Charles Eldering and Gregory Flickinger, disclose even further possible methods and apparatus for delivering ads, ARLs and instructions to the STBs.

[0063] In order to display the ads in the EPG, the subprocessor 234 and/or the main SCU 204 consults the schedule in order to determine what ads are to be displayed when and where in the EPG. The ads are then retrieved, e.g., via the

Internet in real time or from the local memory, and are forwarded to the channel processing circuit 222. The channel processing circuit then inserts the ads into the EPG.

[0064] In accordance with the present invention, it may be desirable for the STB to send information to the head end indicating when an advertisement has been displayed in the EPG so that the television service provider can bill the advertiser for having shown the ad. In such a case, the modem 230 could be used for transmitting as well as receiving through port 232. In this particular embodiment, the system control unit 204 can transmit information upstream through subprocessor 234, modem 230 and port 232.

[0065] FIG. 3 is a flowchart illustrating one exemplary process flow for receiving EPG advertisements, ARLs, and the information/instructions for organizing the queue. In step 301, ARLs, instructions for organizing the ARLs and the queue and advertisements are received via the modem. In step 303, the ads are stored to the large memory 214. In step 305, the instructions for organizing the queue are processed to create a queue comprising a list of ARLs and designating an order in which the ads corresponding to the ARLs are to be displayed.

[0066] This process may be repeated at particular intervals, e.g. every week. In one embodiment, the EPG advertisement queue may be completely rewritten at these intervals. In other embodiments, new ARLs may simply be added to the queue while any ARLs corresponding to advertisements which have not yet been displayed remain in the queue.

[0067] FIG. 4 is a flowchart illustrating ad insertion in accordance with one particular embodiment of the invention. In this embodiment, the ads are retrieved and displayed only when it is determined that the set top box has tuned in to the EPG channel. Accordingly, the processing illustrated in the flow chart of FIG. 4 is commenced at step 402 upon indication that the EPG has been tuned in. This may be indicated by an interrupt signal or a flag being set in a manner well known in the art. In step 404, the EPG is displayed. In step 406, subprocessor 234 consults the schedule to determine what ad or ads should be displayed in what windows in the EPG and for how long. In step 410, the ads are retrieved, such as from the local memory or from a remote server as the case may be. In step 410, the ads are inserted into the EPG.

[0068] In this example, we will assume that the television service provider has arranged with the advertisers to display the ads for a particular period of time that the EPG channel is tuned in. Accordingly, in step 414, a timer is started corresponding to each ad that is being displayed. In step 414, it is determined whether the total display period for each ad has been reached. If so, flow proceeds to step 414 in which the queue is updated. In a simple embodiment, this simply may involve deleting the ARL for the ad that was just displayed. Flow then proceeds to step 420, in which the fact that the ad was displayed is reported back to the television service provider. This may involve immediately sending the information upstream to the head end via the modem. In other embodiments, it may involve writing this data to a storage location in local memory, for sending upstream, along with the contents of other related storage locations, at a later time. In step 421, the counter for that ad is reset. Flow

then returns to step 406 where the queue is consulted again to determine what advertisement should be inserted in place of the one just removed.

[0069] If, on the other hand, in steps 416, no ads have timed out, flow proceeds to step 422 where it is determined if the EPG is still tuned in. If yes, flow proceeds back up to step 416 and loops through steps 416 and 422 (with a possible detour to steps 418-420 et seq.) until the EPG is tuned out. At that point, flow proceeds from step 422 to step 424 where the timers are stopped and stored in memory for retrieval when the EPG is next tuned in.

[0070] The invention allows advertising to be delivered independently from the EPG and in formats, e.g., HTML, streaming video, different from the EPG. This allows for the possibility of more individually targeting advertisements than may be available through direct incorporation into the EPG stream.

[0071] For instance, the invention can be used with an analog cable system having no addressability in connection with the television program and EPG transport stream. The ads can be downloaded through an entirely different transport mechanism that allows for individual STB addressability.

[0072] Further, in situations where the ads are not stored locally, but are retrieved via the Internet or through a direct connection over the telephone lines or any other network, the ads can be updated by the advertiser on their own server and thereafter be immediately available for display to the subscriber(s) the next time the subscriber tunes in the EPG. Further, in such embodiments, the subscriber need not have memory suitable for storing ads.

[0073] In addition to simple HTML files, the ads may also include streaming audio and/or streaming video, which, depending upon the bandwidth of the subscriber's connection can also be delivered in real time. Alternately, if sufficient bandwidth is not available for real-time delivery, they may be delivered ahead of time and temporarily stored at the subscriber's node.

[0074] Many scheduling algorithms are possible, including time based scheduling in which an ad is changed at fixed intervals regardless of whether the EPG has been tuned in or not. Another option is a single view option in which a new ad is retrieved and displayed each time the EPG is tuned in, at which time that ad is discarded. In another embodiment, an ad might be shown a certain number of times the EPG has been tuned in, either consecutively or interleaved with other ads, with the ads being counted as displayed each time the EPG is newly tuned in. Another option is to display an ad at a certain time of day. Any combination of any of the above methods also can be utilized.

[0075] Streaming audio can be in any streaming audio format such as Real Audio or Microsoft Windows Multimedia format. Streaming video may be in any of a number of formats, such as MPEG.

[0076] Since streaming audio and/or video may not be able to be downloaded quickly enough to be displayed immediately, particularly if the STB has a low bandwidth connection, a less bandwidth intensive Internet based ad can be displayed initially while the streaming audio or video file

is downloaded. As soon as the file is sufficiently downloaded and ready for playback, the still ad can be replaced with the streaming video/audio ad.

[0077] Having thus described a few particular embodiments of the invention, various alterations, modifications, and improvements will readily occur to those skilled in the art. Such alterations, modifications and improvements as are made obvious by this disclosure are intended to be part of this description though not expressly stated herein, and are intended to be within the spirit and scope of the invention. Accordingly, the foregoing description is by way of example only, and not limiting. The invention is limited only as defined in the following claims and equivalents thereto.

What is claimed:

1. A method of providing advertising in an electronic program guide for television, said method comprising the steps of:

delivering an electronic program guide to an addressable unit using a first communication channel;

delivering at least one advertisement to said addressable unit in a second communication channel, said at least one advertisement being comprised of an Internet accessible file; and

inserting said advertisement into said electronic program guide.

2. The method of claim 1 wherein said first and second channels are different channels of a single transport stream.

3. The method of claim 1 wherein said first channel and said second channel comprise first and second transport streams, respectively.

4. The method of claim 3 wherein said first transport stream is one of analog cable, digital cable, digital broadcast satellite and switched digital video.

5. The method of claim 4 wherein said second transport system comprises the Internet.

6. The method of claim 1 wherein said Internet file comprises an HTML file including one or more of a streaming video file, a streaming audio file, a Java file, a FLASH file, and a Javascript file associated therewith.

7. The method of claim 1 wherein said advertisement delivery step comprises the steps of:

storing said at least one advertisement on a network comprising said second channel at a node remote from said addressable unit; and

retrieving, at said addressable unit, said at least one advertisement from said remote node responsive to determination of an advertisement insertion opportunity.

8. The method of claim 1 wherein said advertisement delivery step comprises the steps of:

delivering said at least one advertisement to said addressable unit at a time prior to determination of an opportunity to insert said advertisement into said electronic program guide; and

storing said advertisement in a memory local to said addressable unit for later retrieval responsive to determination of an advertisement insertion opportunity.

9. The method of claim 8 wherein said insertion step further comprises retrieving said at least one advertisement from said local memory.

10. The method of claim 1 wherein said advertisement inserting step comprises the steps of:

determining if the electronic program guide is being viewed;

if said electronic program guide is being viewed, inserting said at least on advertisement into said electronic program guide.

11. The method of claim 1 wherein said at least one advertisement comprises a plurality of advertisements, said method further comprising the steps of:

creating a schedule for displaying said advertisements in said electronic program guide; and

wherein said inserting step comprises inserting said advertisements in accordance with said schedule.

12. The method of claim 11 wherein said step of creating a schedule comprises storing a queue in a memory, said queue comprising an ordered list of advertisement resource locators (ARLs), each of said ARLs comprising data disclosing a location of a corresponding advertisement.

13. The method of claim 12 wherein said queue is stored locally at said subscriber node.

14. The method of claim 13 further comprising the step of:

delivering to said subscriber node instructions dictating how to schedule said advertisements for display in said electronic program guide; and

wherein said step of creating said schedule comprises executing said instructions.

15. The method of claim 14 wherein said ARLs comprise URLs on the World Wide Web.

16. The method of claim 1 wherein said electronic program guide includes a plurality of spaces dedicated to insertion of advertisements and wherein said inserting step comprises inserting an advertisement in each of said spaces.

17. The method of claim 11 wherein said schedule defines an expiration event for each advertisement and wherein said method further comprises the steps of:

detecting said expiration event for any advertisement that is being displayed in said electronic program guide;

removing a presently displayed advertisements upon detection of said expiration event corresponding to said advertisement;

upon removal of any advertisement from said electronic program guide, consulting said schedule to determine a next advertisement to be inserted in said electronic program guide; and

inserting said next advertisement in said electronic program guide in place of said removed advertisement.

18. The method of claim 1 wherein said electronic program guide comprises an HTML file.

19. An apparatus for providing advertising in an electronic program guide for television comprising:

a receiver for receiving an electronic program guide for television via a first communication channel;

a receiver for receiving advertisements via a second communication channel, said advertisements comprising Internet based files; and

an advertisement insertion circuit for inserting said advertisements into said electronic program guide.

20. The apparatus of claim 19 further comprising a processing circuit for processing said HTML files to generate displays corresponding thereto that can be inserted into said electronic program guide.

21. The apparatus of claim 20 wherein said first and second channels are different channels of the same transport mechanism.

22. The apparatus of claim 21 wherein said first and second channels comprise different transport mechanisms.

23. The apparatus of claim 22 wherein said first transport mechanism is one of analog cable, digital cable, digital broadcast satellite and switched digital video.

24. The apparatus of claim 23 wherein said second transport mechanism comprises one or more of a DOCSIS modem, a telephone network and the Internet.

25. The apparatus of claim 19 wherein said Internet based file comprises an HTML file including one or both of a streaming video file, a streaming audio file, a Java file, a FLASH file, and a Javascript file associated therewith.

26. The apparatus of claim 19 further comprising:

means for retrieving said advertisements from a remote location coupled to said apparatus via said second transport mechanism responsive to determination of an advertisement insertion opportunity in said electronic program guide.

27. The apparatus of claim 19 further comprising:

means for retrieving said advertisements at a time prior to determination of an opportunity to insert said advertisement into said electronic program guide; and

a memory for storing said advertisements for later retrieval responsive to determination of an advertisement insertion opportunity in said electronic program guide.

28. The apparatus of claim 27 wherein said advertisement insertion circuit comprises means for retrieving said advertisements from said memory.

29. The apparatus of claim 19 further comprising:

a circuit for determining if said electronic program guide is being viewed; and

wherein said advertisement insertion circuit inserts said advertisements into said electronic program guide only if said circuit for determining determines that said electronic program guide is being viewed.

30. The apparatus of claim 19 further comprising:

a circuit for creating a schedule for displaying said advertisements in said electronic program guide; and

wherein said advertisement insertion circuit inserts said advertisements into said electronic program guide in accordance with said schedule.

31. The apparatus of claim 30 wherein said circuit for creating a schedule creates a queue in a memory, said queue comprising an ordered list of advertisement resource locators (ARLs), each of said ARLs comprising data disclosing a location of a corresponding advertisement.

32. The apparatus of claim 31 further comprising:

a receiver for receiving instructions dictating how to order said ARLs in said queue; and

wherein said circuit for creating said schedule does so in accordance with said instructions.

33. The apparatus of claim 32 wherein said ARLs comprise URLs on the World Wide Web.

34. The apparatus of claim 19 wherein said schedule defines an expiration event for each advertisement and wherein said advertisement insertion circuit further comprises:

means for detecting said expiration event for any advertisement that has been displayed in said electronic program guide;

means for removing said displayed advertisement upon detection of said corresponding expiration event; and

means for consulting said schedule upon removal of any advertisement from said electronic program guide to determine a next advertisement to be inserted in said electronic program guide and inserting said next advertisement in said electronic program guide in place of said removed advertisement.

\* \* \* \* \*

**EVIDENCE APPENDIX G**  
**COPY OF "IBM TECHNICAL DISCLOSURE BULLETIN"**

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TDB-ACC-NO: NN971189

DISCLOSURE TITLE: Focus Highlight for World Wide Web Frames

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DISCLOSURE TEXT:

Disclosed is a method to provide a visual indicator of input focus in web pages using frames.

Frames are a commonly used design element on web pages.

While

frames are useful in many respects, they present a number of problems

for users. The most serious problem is that the user has no feedback

to show which frame has input focus. If, for example, the user invokes

the "Print frame" option from the browser's menu, they may well print

a

frame different than the one they intended. Most web users have encountered problems related to this and frames are widely criticized

among the design community.

A secondary problem is that most browsers

do not show frame borders and the user, thus, has no clear feedback

that

the page is composed of frames or what the boundaries of each frame are.

A solution to this problem is to provide a focus indication for

the frame which has input focus. One form of focus indication which is



consistent with conventional Graphical User Interface (GUI) applications  
is to provide a highlight border around the frame which has focus.

This  
would indicate to the user that the frame has focus and show the boundaries of that frame. This indicator could be provided by the browser.

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**EVIDENCE APPENDIX H**  
**COPY OF MATTHEWS III U.S. PATENT NO. 5,815,145**